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**Transplanting Education: A Case Study of the Production
of “American-style” Doctors in a Non-American Setting**

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ABSTRACT

This thesis examines the transfer of an American pedagogical model to the Arabian Gulf against the wider context of the globalisation of higher education. Weill Cornell Medical College in Qatar is used as a case study to examine how American medical knowledge and professional practice are transmitted to and assimilated by an Arabic social setting. It considers the workings of what is presumed to be a universal pedagogical model by examining how the degree is culturally translated and localised in Qatar. It addresses the question of whether or not the Cornell degree of “Doctor of Medicine” is simply an American product transplanted to the Middle East, or rather a malleable artefact: sought out, manipulated and shaped by the Qataris for their own ends.

Medical education necessitates a highly challenging process of acculturation that is amplified for Arabic-educated students who enter the American medical curriculum without many of the values derived from a Western educational system. In addition to language, students from Arabic-medium schools cite dress, familial, cultural and ethical dissonance as issues that had to be negotiated while undertaking the degree. Students enrolled at the American-style medical college currently divide their clinical training between the Gulf and America. The structure of the imported curriculum and biomedical practices generated in the metropole demand that students become bilingually competent in both Arab and American health care systems. The “American way” of doing things, however, does not always translate or conform to cultural mores and standard practice within the Gulf setting. This thesis follows Arab students as they move between the coeducational American academic setting and local health care facilities, examining the ways that the physicians-in-training contextualise, appropriate and reconstruct the medical degree according to their own cultural referential framework.

The thesis introduces the language of “transplantation” as a heuristic tool through which the globalisation of higher education might be explored conceptually. It is an ethnography of an emergent educational transplant propagated in a globalised era, which explores novel modes of knowledge transfer, institutional and social arrangements across local and transnational boundaries, changing subjectivities and the generation of new life forms. In a setting in the Islamic world, Weill Cornell Medical College in Qatar provides a strategic site for observing the dynamics of a nation and its people grappling with modernity. Through its production of American-style doctors in a non-American setting, Cornell’s transnational medical school serves as a niche through which to explore the tensions that arise in global models of tertiary education.

DECLARATION OF OWN WORK

The thesis has been composed by the candidate, and the work has not been submitted for any other degree or professional qualification except as specified.

Date: 6 July 2011. Signed.....

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STAKEHOLDERS

Al-Bayan Educational Complex for Girls and Omar Bin Al-Khattab Educational Complex for Boys

Two government-funded independent scientific schools that are attempting to “foster the creativity and critical thinking the 21st century demands” (Supreme Education Council Website). The experimental school model represents a dramatic departure from traditional Qatari governmental schools in terms of its curriculum design and teaching methods.

Cornell University

Based in Ithaca in upstate NY, Cornell University is considered an Ivy League university and one of the top ranking research universities in the US. Founded in 1865, Cornell was established as an inclusive, coeducational institution “...where any person can find instruction in any study” (Ezra Cornell, 1868). The main campus of Cornell’s medical school is located four hours away in NYC.

Hamad Medical Corporation (HMC)

HMC is the primary, non-profit health care provider in the State of Qatar and the primary site of clinical training for the medical college (i.e. Medical clerkships). The Corporation comprises Hamad General Hospital, Women’s Hospital, Rumailah Hospital, the Psychiatric Hospital and primary health care centres located throughout the country.

Joan and Sanford I. Weill Medical College and Graduate School of Medical Sciences of Cornell University (WCMC-NY) and New York-Presbyterian Hospital (NYPH)

Founded in 1898, this is now the official name of Weill Cornell Medical College. Sharing a joint campus in the Upper East Side of Manhattan, Weill Cornell Medical College and its clinical affiliate, New York-Presbyterian Hospital (NYPH), are often referred to as the ‘mother ship’ by Cornell faculty in Qatar. NYPH is the clinical setting where Subinternships and Electives are undertaken during third year and fourth year.

WCMC’s triple mission is devoted to achieving excellence in education, research and patient care. Cornell ranks amongst the top clinical and research centers in America. WCMC is fully accredited by the Liaison Committee for Medical Education of the American Medical Association and the Association of American Medical Colleges.

Joint Advisory Board

The role of the Joint Advisory Board is to provide advice and assistance to the parties and to the Dean of WCMC-Q (For members see Appendix O).

Qatar Foundation for Education, Science and Community Development was founded by Emiri Decree in 1995 by His Highness Sheikh Hamad Bin Khalifa Al-Thani and is chaired by his consort, Her Highness Sheikha Moza bint Nasser. Education City is home to QF and Her Highness' headquarters, WCMC-Q and a number of other premier universities (Table 5, p. 84); each having been selected because of their educational niches. It also comprises a science and technology park housing tenants representing a number of blue-chip companies and world-class research facilities. Due to QF's close affiliation with Education City, the terms are often used interchangeably when referring to the campus.

[illegible]

QF is an independent, non-profit organisation guided by the principle that its people are the nation's greatest natural resource. The organisation's vision and motivations are explicit: "To develop people's abilities through investments in human capital, innovative technology, state of the art facilities and partnerships with elite organizations, thus raising the competency of people and the quality of life" (QF 2007). QF's Board of Directors comprises internationally recognised leaders from the worlds of academia, business and government (Appendix N). The Board meets frequently throughout the year for the purposes of reviewing QF's advancement towards achieving its mission and to assess strategic initiatives. Education City, a 1000-hectare campus allocated by the state, is the primary locus of QF activities. QF

is directly responsible for the governance of Education City and is not subject to any government ministry or department.

While the President's Office is ultimately responsible for overseeing the implementation of the QF mission and taking new initiatives forward, various components of QF management are allocated to the following departments: Education Division (where I was initially stationed); Administration Division; Capital Projects and Facilities; Research; Strategic Planning Directorate; and Communication Directorate. Each division reports directly to the President. QF funding comes directly from the Qatari government but control of its expenditures and policies lies with its Board of Directors.

Now that QF is entering its second decade and many of the planned institutions and facilities are in place, QF's research mission is coming to the fore.

Sidra Medical and Research Centre

Sidra Medical and Research Centre is a collaborative venture between HMC and WCMC-Q that is due to open in 2012. Sidra's mission is to, "[raise] the standard of health care throughout the country and [provide] valuable opportunities for research and learning." Based on a North American model, Sidra will be an academic medical centre specialising in the provision of women's and paediatric health care. Currently under construction on a site located three hundred metres from Cornell, Sidra will function as the college's primary teaching hospital and will have the capacity to offer residency programs in line with those available in America.

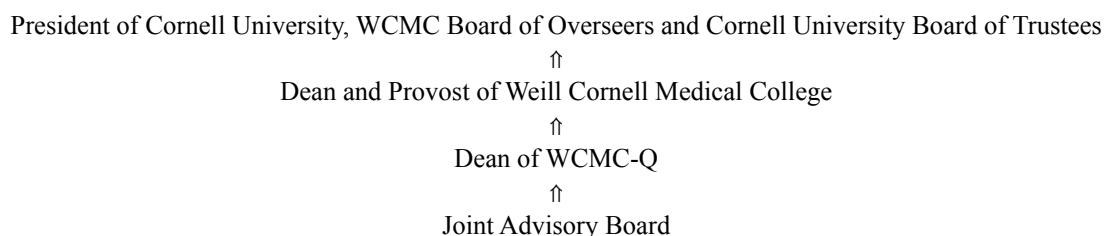


Figure 1. WCMC-Q lecture theatres. Photo: Martin Marion

Weill Cornell Medical College in Qatar (WCMC-Q)

Situated in Education City, WCMC-Q is the first coeducational tertiary institution and the only medical college in the country. Established as a joint venture between

The governance structure established for WCMC-Q



QF and Cornell University in April 2001 (Appendix B), the first students entered the Pre-medical Program in August 2002. QF oversees and absorbs all financial expenditures associated with the construction, maintenance and operation of WCMC-Q facilities.

WCMC-Q shares WCMC's tripartite mission. It should be noted, however, that my fieldwork was contemporaneous with the establishment of the medical school. At this early stage, attention focused primarily on education and patient care. During this period, research facilities were still under construction and technical equipment was in the process of being ordered. Only now that the first few classes have graduated has WCMC-Q been able to divide its focus and fully embark on its research mission. Cornell's research facilities are now operational. WCMC-Q is currently in the process of implementing a five-year plan that involves building research infrastructure, recruitment of high calibre scientists and training local talent. Working in conjunction with local stakeholders (e.g. HMC, QSTP, Supreme Council of Health), the institution aims to improve the health of the Qatari population through the establishment of "cutting edge basic, translation and clinical research" and to "establish WCMC-Q as a center for biomedical research excellence" (Weill Cornell 2010). The State of Qatar has pledged 2.8 per cent of its GDP to research, amounting to approximately US\$ 1.5 million per year. This funding is made available through QF via grants awarded by the Qatar National Research Fund (QNRF) (successful peer-reviewed proposals can be awarded between US\$ 20,000 to \$350,000 per annum) (QF 2007).

INTRODUCTION

A Clinical Encounter of East Meets West

From the exquisite gold-embossed invitations framed in carnelian red, to the VIPs jetted in for the occasion, the imported regalia, and the specially commissioned mace transported from Ithaca – no expense has been spared. The opulent Ritz Carlton ballroom is transformed into a spectacular Cornell showcase. In red gowns with green velvet panels and chevrons, black mortarboards adorned with gold tassels perched upon their heads, or worn directly over their shaylas,¹ the Class of 2008 leads the academic procession into the hall against the celebratory music of “Pomp and Circumstance”. Seven thousand miles from NY, on the edge of the Arabian Gulf in a brand-new city of high-rises surrounded by sand dunes, the historic graduation of the first medical class of Weill Cornell Medical College in Qatar looks like any all-American commencement exercise.

Closer inspection, however, reveals an assemblage of two different cultures. Each seat is strewn with a bilingual Arabic and English booklet outlining the commencement rituals. The six hundred guests, dressed in suits, thobes, dresses, or glittering abayas, remain standing for the Qatari National Anthem followed by a more emphatic Star-Spangled Banner. The formal ceremony opens with an invocation and a recitation from the Quran. When Cornell’s esteemed President takes to the podium, he greets the Emir, the Emir’s consort and the people of Qatar in word-perfect Arabic.

In unison, the students recite the Hippocratic Oath and then one by one cross the dais to be draped in the traditional green velvet hoods lined with red. They proceed to the President who slides the tassel to the left side of their cap, then shakes the student’s

¹ A loose black headscarf that frames the face.

hand or – if the student is female and wearing a hijab – respectfully mimics her gesture and raises his right hand to his heart, thereby avoiding physical contact.



Figure 2. Graduation ceremony. Photo: Tanya Kane

The elected student speaker, Jehan Al Rayahi, begins her speech by admitting she has never attended a college graduation and is unfamiliar with the concept of valedictorian. She had to look up exactly what this role entailed. She then recounts the story of the multicultural² Class of 2008 and their pioneering role in the “evolution of medical education in a country.” Miss Al Rayahi’s speech charts the twenty-five students’ journey from the Pre-medical Program through to the final fifteen’s medical graduation. She speaks of “being under a microscope” and the international media frenzy – the Financial Times, CNN, Reuters, 60 Minutes, Time

² The inaugural class represented students from eight different nations. A quarter of the graduates were Qatari nationals.

Magazine – among others that “stalked” them in an effort “to indulge the public’s curiosity”.³

Miss Al Rayahi’s speech reveals an academic life that is conducted within the goldfish-bowl of celebrity. What made this nascent programme in the desert so interesting to media outlets throughout the world?



Figure 3. Inaugural class (two Qatari female graduates are absent from this photo). Photo: Martin Marion

Transplanting education

Education City is just one example of a myriad of “educational transplants” mushrooming from the Gulf to Singapore to South Africa. There is competition with other globally recognised and prestigious university programmes in the Arabian Gulf, where Qatar can be seen vying with the Emirates and other states to become the “educational hub” (Appendix H). Some of the faculty and administrators involved in these projects dub this process “transplanting”. One interesting case is Cornell University which has recently opened up a branch of its medical college overseas. Weill Cornell Medical College in Qatar (WCMC-Q) happens to be a medical school and like many such science-based programmes, it is offering supposedly culture-free knowledge – indeed those directly involved in setting up the WCMC-Q programme vehemently insisted that the NY and Doha programmes must be absolutely identical for the purposes of certification. As an anthropologist looking at the globalisation of higher education, I found that in practice the American university was a good

³ Anticipating the high volume of press coverage that the 2008 inaugural graduation would undoubtedly generate, the class attended a “Working with the Media” training session during which they were taught how to handle media interviews.

example to illustrate Inda and Rosaldo's observations regarding the articulation of the "global" and the "local". In other words, I was able to witness firsthand "how globalizing processes [in this case medical education] exist in the context of, and must come to terms with, the realities of the particular societies, with their accumulated – that is to say – historical – cultures and way of life" (Inda and Rosaldo 2002: 4). Given my academic interest in the interplay between globalising processes and changing cultural forms, my fieldwork at WCMC-Q positioned me well not only to chart the movement of particular flows of people, capital, technologies and ideologies that traverse the globe; but also to observe the local reception to a supposedly universal medical education and its partial, but by no means total, translation into local terms. It also gave me the opportunity to document the experiences of medical students living in a specific locality whose academic and "daily lives are contingent on globally extensive social processes" (Inda and Rosaldo 2002: 5), serving as a case study of the globalisation of higher education.

Medicine is a scientific discipline and thus faculty of WCMC-Q generally assume that the knowledge, ethics and practices which comprise their programme are inherently universal and neutral and can therefore be applied anywhere. Doctors diagnose illness according to standardised criteria of pathologies which they consider to be universally valid, privileging an understanding of illness as it occurs within the boundaries of the physical body, disembodied from the patient's socio-cultural milieu. Viewed through this lens – whereby patients and illness appear the same the world over – it is little wonder that WCMC agreed to offer the degree in a foreign context. According to some of the key administrators it was simply a case of "transplanting" a successful scientific, universally-valid and culturally-neutral programme. It was precisely these notions of the universality and neutrality of medical knowledge that imbued the American institution with the confidence to embark on this transnational experiment, without carefully considering that for many of the students in Qatar the knowledge would not travel quite so easily. Various flaws with this notion of cultural neutrality were exposed as my research progressed and it was shown that a number of local NY traits were folded into the supposed

cultural neutrality of the programme. These traits will gradually establish a more complete picture of the “Americanness” of the original transplant as the thesis proceeds.

That some WCMC-Q administrators and faculty conceive of the medical programme as a “transplant” invokes a surgical analogy whereby the training package is harvested in the US, put on ice and transported to the Gulf. This suggests that the morphology of the degree “can be decontextualized and recontextualized, abstracted, transported, and reterritorialized and...designed to produce functionally comparable results in disparate domains” (Ong and Collier 2005: 11). And for the most part it does, but as with any transplant, the grafting process is not without complications and cannot generally be achieved without an accompanying suspension of the recipient body’s natural tendency toward rejection. Despite the belief of medics and university administrators that medical knowledge is universal, anthropologists and sociologists have shown how deeply medical education is structured by prevailing attitudes, beliefs and cultural assumptions of the individuals and the society in which it is generated. The Qatar programme is purported to be identical to that taught in NY: the goal is to teach exactly the same degree on both campuses. However, in practice there are a number of American elements or assumptions that give rise to tensions. It is worth noting from the onset that students’ Islamic belief did not preclude full engagement with the logics of modern science. It is not science itself, but rather the cultural and ethical dimensions inherent in a US medical education that present the most apparent challenges to the educational graft.

There are certain salient features of the transplantation process – particularly the autoimmune mechanisms involved in transplant interventions – that match what is occurring in this educational venture. I will therefore be testing the metaphor at a number of levels, including the concessions the transplant exacts from its recipients – namely the state of Qatar (including its educational system and medical services) and the individual students. When extended, the metaphor provides a useful means of opening up discussions pertaining to autoimmune responses to conceptual binaries

such as donor/recipient, inside/outside and native/alien bodies. Taken further, the metaphor can be used to deconstruct the implications that the transnational educational transplant has on sovereignty, citizenship, neoliberal agendas, ethics regimes and the relations between nation-states. Thus, transplantation and its associated autoimmune processes provide a useful tool for analysing modern tertiary education in a globalising world.

Beyond oil

Qatar, a tiny energy-rich Gulf state, currently boasts the largest enclave of American universities in the Middle East. At the beginning of the millennium, QF entered into formal institutional partnerships with a number of elite American universities. The first professional school to be recruited to Education City was WCMC. The recruitment of foreign institutions of higher education can be viewed as the Qatari elite importing bodies of knowledge, professional practices, technologies and institutional frameworks as opposed to creating their own.

Despite the current financial climate, Qatar's economy continues to grow because of its investment in and exportation of liquid natural gas. In the past few decades Qatar has discarded its former status as a poor British protectorate and is in the process of reinventing itself as a dynamic knowledge-based society financed through oil and gas revenues. These proceeds are being used to fund immediate, medium-term and long-term development projects specifically aimed at expanding and modernising infrastructure, public utilities and services. The state's modernist agenda, comprising a transformative social engineering process is effecting sweeping changes, prompting one WCMC-Q visitor to comment, "In essence, Qatar just bypassed the twentieth century!"

Under the leadership of His Highness Emir Hamad bin Khalifa Al Thani and his Consort Her Highness Sheikha Moza bint Nasser, the State of Qatar has embarked on a series of neoliberal development policies designed to "transform Qatar into an

advanced country by 2030” (General Secretariat For Developmental Planning 2008: 2). While the term “neoliberal” can be used in a range of different ways, I use the term to denote the selective deployment of interventionist techniques and processes of governance used by the Qatari leadership in its projects of improving the indigenous labour market and optimising its citizenry through human capacity building schemes (namely through public investment in education). I will discuss this concept more thoroughly in Chapter 4. Owing to these strategic reforms, the state of Qatar has undergone much social, political and economic liberalisation over the past decade.

Instruments of statecraft (e.g. economic investment, policies, institutions, diplomacy) are being mobilised in an effort to recalibrate specific sectors of society. QF, the governing body charged with the restructuring process, aims to equip “a new generation of engaged and innovative leaders [with] the tools required to face the challenges of an increasingly global society” (QF 2007). QF’s mission, made explicit on its website, is “to prepare the people of Qatar and the region to meet the challenges of an ever-changing world, and to make Qatar a leader in innovative education and research.” These sentiments are echoed by the Higher Education Institute (HEI), the funding arm of the Supreme Education Council, which contends that, “...the people of Qatar are our greatest natural resource. It is Qatar’s intellectual wealth that will sustain our long-term growth and development” (HEI 2006: 1). To achieve these ambitious goals, QF supports a network of centres and partnerships with elite institutions. Within the context of neoliberalism, a well-educated population comprises a valuable labour resource. The provision of appropriate training/education is aimed at ensuring that each individual is performing to his/her highest potential and in this way contributes to the diversification and sustainability of the economy. With education at the core of the Qatari leadership’s desire to build a sustainable future and to help the nation compete in the world market, it has been imperative for the nation to improve its provision of education, especially at the tertiary level.

Envisioned by its creators as a center of excellence in education and research, QF's flagship project, Education City, is intended to be the "engine that will drive Qatar into a new knowledge-based era" (QF 2007). Such rhetoric echoes that documented by Olds (2007) in Singapore who notes that the state underwent a "discursive reframing...to become credibly known, in selective academic, industry, and media circles as a cosmopolitan and creative space, a vibrant and diverse global city integrating into the lattice undergirding the global network economy" (Olds 2007: 960). Qatar's authoritarian regime is also utilising a framing discourse both to articulate its developmental objectives and to present itself as a state embarking on a neo-colonial exercise in the sense that it is inviting foreign institutions in to help recalibrate certain segments of society in accordance with global standards. In its statement, "Qatar Foundation is transforming Qatari society by educating the rising generation to the highest world standards" (QF 2007), the organisation cites global benchmarks, demonstrating that their educational strategy transcends a bounded national agenda by endowing students with the skills necessary to meet the challenges of an increasingly global world.



Figure 4. WCMC-Q at dusk. Photo: Martin Marion

An American university in a non-American setting.

Established at the request of QF and in partnership with Cornell, WCMC-Q is an institutional clone of the NY medical school sharing the same name. The college is currently in its seventh year of operation. The Medical Program "replicates the curriculum, quality and standards" of that in America (college website). The two

programmes are educationally equivalent and the same MD degree is awarded on both campuses. Perceived adherence to the same set of standards regardless of location is essential if the nascent institution is to gain legitimacy. Yet, claims of identity presume that it is possible to transfer the pedagogical package unchanged. Consistent with many discussions of transnational phenomena, these dialogues “rarely deal with local situations in context” (Merry 2006: 3). In reality however, a number of tensions are encountered, not least of which is the status of the imported institution.

Education City has sprouted up in cream limestone from the desert sands.⁴ Occupying an expansive tract of land situated on the outskirts of Doha, Education City (*Madinat al-Talamea*) is largely invisible to people uninvolved with the educational enterprise.

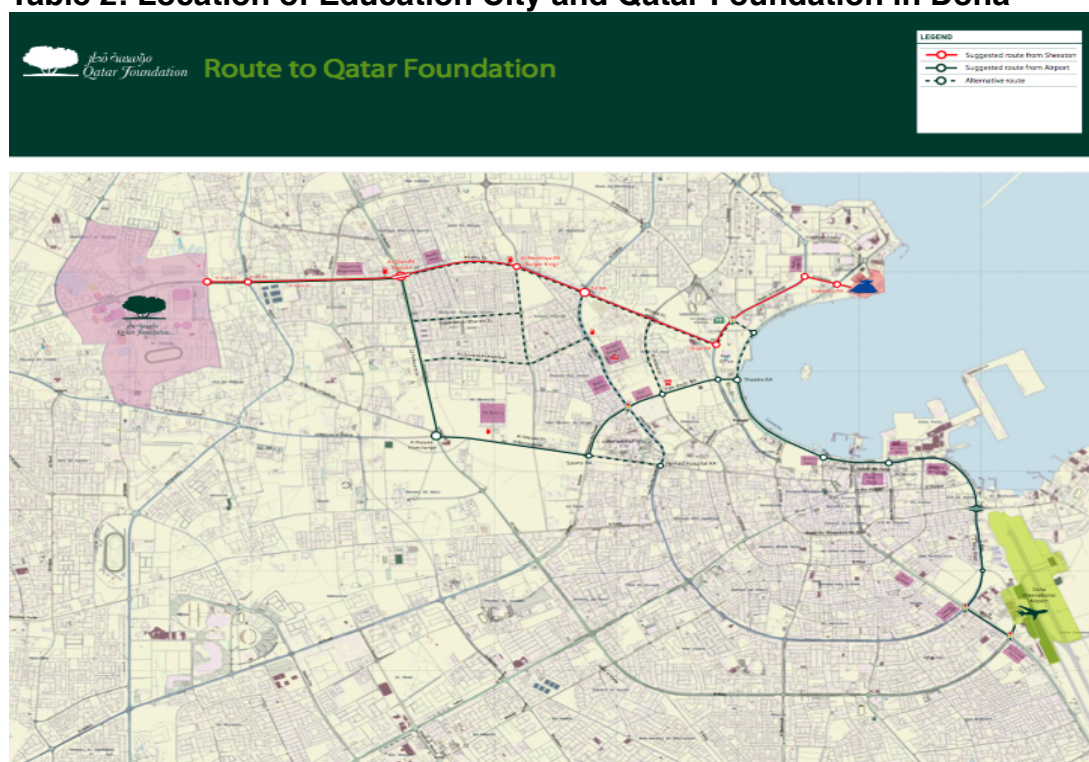


Figure 5. Exterior view of WCMC-Q. Photos: Martin Marion

⁴ As explained on the QF website (QF 2007), the Sidra tree, a species native to Qatar that thrives in the desert is the symbol of QF and Education City. It is emblematic on a number of levels. First, prior to the establishment of permanent settlements, the branches of the Sidra tree offered nomads shade and thus functioned as a place where people congregated and exchanged knowledge. Second, its deep roots are symbolic of an anchor connecting contemporary education with the nation’s traditional culture and heritage. In a schematic diagram of the Sidra tree displayed at a QF information centre, the roots represent values, tradition and culture; the trunk symbolises globalisation and progress; and the branches signify self-realisation, modernity, aspirations, promise and success. The image is of a growing tree spreading its branches whilst remaining firmly rooted in the ground. The image is meant to convey the foundation’s simultaneous desire to grow and embrace modernity but also remain grounded in Qatari values and culture. Third, a tree represents growth and new life. A tree blossoming in a harsh desert environment is something unusual and worthy of notice, as is QF’s innovative approach to education.

The impressive university buildings are matched only by the unprecedented Qatari investment in higher education.

Table 2: Location of Education City and Qatar Foundation in Doha



Source: QF 2007

Qatari leadership is committed to developing its tertiary education sector. In line with this, approximately one fifth of government spending is allocated to education (19.6%), representing 3.3% of the GDP (UNESCO 2008).⁵ In the 2005-2006 academic year, 8 445 individuals were enrolled in higher education domestically, 91% attending Qatar University⁶ (of which 74% are Qatari), with the remainder attending institutions in Education City or the College of the North Atlantic (Stasz et al. 2007: 67-68). While over half of the students at enrolled at universities in Education City are Qatari nationals, only 20% of these attend WCMC-Q. The disparity in enrollment between the national university and other post-secondary institutions can most likely be attributed to the newness of the programmes on offer

⁵ Exact figures on the distribution of public expenditure on tertiary education are not available.

⁶ Qatar University is the only indigenous university and was established in 1974.

in Education City where QF leadership expects the student population to rise exponentially over the next few years. Until now, most post-secondary graduates have found employment in the civil service, but again, QF expects this to change as a result of the new American universities and the strategically selected programmes that they bring with them, each geared to transform specific facets of Qatari society. University education is regarded as “pathway to fulfillment” and as such is becoming a requisite feature of modern Qatar.

The state has placed great emphasis on the expansion of education as a cornerstone of its nation-building project. Qatar’s upgrading of its provision of higher education is closely related to the nation’s modernisation agenda and is driven by its determination to rebrand itself on the world stage. As outward signifiers of a nation’s modernity, prestige and openness, “universities are one of the most conspicuous ways for younger independent states to assume their place among ‘the community of nations’ and, as such, they in many ways constitute important points of articulation with ‘the outside world’” (Fahy 1998: 5). It should be remembered, however, that the students attending the foreign universities in Qatar experience these articulations at a local level and thus their grounded social experiences of global academic institutions merit discussion.

To reduce Qatar’s educational overhaul to a mechanical exercise in educational reform without paying heed to its religious and cultural dimensions is to present not only a skewed, but incomplete picture. According to Paragraph ‘C’ of the 7th Article of Provisional Fundamental Law of Qatar:

The goal of education is the creation of people strong in body, mind and personality; who believe in God, who are equipped with knowledge and higher moral qualities, who are aware of their Arabic and Islamic heritage and conscious of its rights and obligations.

These explicit objectives are indicative of the nature of Qatari education. Education in this Arab context is not merely confined to the attainment of technical and

professional skills, but rather, is inextricably linked to Islamic and Arabic values and the socialisation of the individual. This extract provides valuable insight into the types of knowledge and worldview being endorsed by the government.

Universal universities

Contrary to what we as academics might expect, in some societies, universities are not the longstanding, familiar institutions we might expect them to be. In Qatar, for instance, post-secondary education is a relatively new phenomenon, while American universities are newer still. As a nascent social institution, therefore, WCMC-Q provides a backdrop against which several ethnographic problems play out. For instance, what is the social nature of the American medical college in the Qatari context? How does the college attend to the context of cultural beliefs, practices and needs of its Gulf-based students and its largely Arab/Muslim patient base? What can be garnered about the nature of the transnational university from describing its relation to the social world within which it is located? Above all, what are the implications that this foreign medical training has on the formation of student physicians as social subjects?

First, it is necessary to address the status of the American university, both as an institution and sphere of social activity, as well as an object of analysis both inside and beyond Qatari society. To the best of my knowledge, such an analysis has not previously been undertaken. In fact, tertiary education as a subject has largely been ignored in ethnographic literature. What has been written about educational institutions deals almost exclusively with primary and secondary schools, and tends to be confined to the domains of economics, political science and international agencies working in developing nations (e.g. numeric performance indicators related to issues such as female access to education, literacy and numeracy levels). Yet the dearth of anthropological accounts focusing on advanced education is difficult to comprehend given the discipline's current fixation with topics such as social reproduction and change, the impact of colonialism, contemporary institutions,

power and notions of modernity (Fahy 1998: 3). Certainly, the paucity of attention paid to institutions of advanced learning belies the transformative impact that the introduction of transnational universities is having on developing nations. That said, an ethnography of a transnational university in the Gulf will contribute a much needed comparative perspective to the extant literature that hitherto has focused predominantly on Western models of education in the Western world. As universities start to operate internationally experimenting with different modes of education, grounded and qualitative studies focusing on the perspectives and subjective experiences of new student populations might prove beneficial.

Owing to the similarity of activities conducted within universities, there is a tendency to conceive of universities as being homogeneous. The salient or *universalising* features of universities – self-governing, structured truth-oriented inquiry (e.g. scholarly research, dissemination of knowledge through lectures), granting of degrees – cast the “university” as a categorical institution irrespective of place. Thus, universality is presumed *a priori* to the extent that notions of institutional interconnectedness are expressed through the employment of female kinship terminology such as “mothership” and “sister campus”.⁷ Fahy raises the point that while a “global fraternity” (or sorority if we are to continue with the gendered language in use in the Gulf) of universities certainly supports intercollegiate knowledge exchange, it “obscures much of what is particular to specific institutions which have emerged from very different historical trajectories and which operate under different economic constraints and within very specific social contexts and cultural frames” (1998: 6). His comment resonates powerfully when applied to the nexus of unique historical, economic and social circumstances of Qatar that led the nation to import an array of premier post-secondary institutions as opposed to developing indigenous models. The following case study of WCMC-Q (i.e. a medical college originally based in Manhattan, complete with a Jewish name, establishing itself in a predominantly Arab/Islamic post 9/11 society) – where the

⁷ See Fahy (1998) who notes similar use of the language of kinship used in conjunction with a Moroccan university.

movement of faculty, the sharing of pedagogical resources, collaborative submissions to international academic journals, and the replication of courses between sister campuses go largely unquestioned – demonstrates that the presumed fraternity of academia masks local specificities of transnational institutions as they are transplanted in new social contexts and cultural milieus.

Corporations, organisations and individuals contemplating participation in ventures involving Qatar often use documents prepared by recognisable international agencies (e.g. World Bank, World Economic Forum – The Arab World Competitiveness Report) as reliable sources of information in their decision-making. Keen to improve its standing in international benchmarking activities (e.g. the Global Competitiveness Index) and to be rated favorably in documents produced by global agencies such as the annual Arab Human Development Reports (AHDRs)⁸ published by the United Nations Development Programme, Qatar has implemented numerous policy recommendations designed to improve quality and accessibility of public services across a range of sectors in line with international standards (e.g. UNESCO, WHO and Joint Commission International). The unique assemblage of domestic and transnational components involved in the Education City enterprise means that “multifaceted articulations” arise which reflect the multiple social worlds involved in the construction of the programmes (Fahy 1998: 7). Such articulations have a pronounced social impact on the educational experience of students undertaking advanced education in Qatar. In the case of WCMC-Q and its conglomeration of foreign faculty, pedagogical strategies, clinical modes of practice and ethical frameworks, the links to the metropole are particularly striking. The thesis considers the implications of transplanting a professional training programme far removed from its educational and health care foundations/origins.

⁸ The main contributors of AHDRs are Arab researchers from a variety of disciplines who report on the conditions and opportunities for human development in the Arab region.

Structure of the transplanted Medical Program

Currently, most students embark on a six-year integrated programme comprising the two-year Pre-medical Program followed by the four-year Medical Program (Table 3), both of which have separate admission processes. All course work takes place in Doha. During their third and fourth years, students divide their time between Doha's Hamad Medical Corporation for clerkships and New York Presbyterian Hospital in NY where they undertake a mandatory twelve-week period of subinternships and electives. Optional research stints can also be taken in either location. In addition, Cornell now offers the one-year Foundation Program to prepare English as a Second Language (ESL) students for the rigours of an English-medium Pre-medical Program. Students enrolled in the Foundation Program tend to come from governmental Arabic-medium schools and the vast majority are Qatari nationals.

Table 3: Six-Year Integrated Program

SIX-YEAR INTEGRATED PROGRAM													
TWO-YEAR PRE-MEDICAL CURRICULUM													
Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
YEAR 1	Pre-medical 1		Introductory Biology	General Chemistry	Calculus	Holidays	Introductory Biology	General Chemistry	Physics	Seminar in Medicine	Writing Seminar		
			FALL — Total Credit Hours = 15					SPRING — Total Credit Hours = 16					
YEAR 2	Pre-medical 2	MCAT Preparation	Physics	Organic Chemistry	Introduction to Psychology	Medical Ethics	Neuroscience	Holidays	Biochemistry	Organic Chemistry	Human Genetics	Immunology	
			FALL — Total Credit Hours = 14						SPRING — Total Credit Hours = 14				
			MCAT Testing					MCAT Testing				Medical Program Application Process	
FOUR-YEAR MEDICAL CURRICULUM													
Year	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
YEAR 3	Medical 1		Molecules, Genes & Cells				Holidays	Human Structure & Function			Host Defenses		
			Medicine, Patients & Society I										
YEAR 4	Medical 2		Brain and Mind		Basis of Disease	Holidays	Basis of Disease			Vacation & USMLE Step 1	Introductory Clerkship Introduction to Anesthesia		
			Medicine, Patients & Society II										
YEAR 5	Medical 3	Clinical Clerkships — Anesthesia Medicine Medicine, Patients & Society III					Neurology Obstetrics & Gynecology Pediatrics	Primary Care Psychiatry Public Health Surgery	Holidays	Clinical Clerkships —			Vacation
YEAR 6	Medical 4	Clinical Clerkships & Electives —					Holidays	Clinical Clerkships & Electives			Advanced Basic Science	M.D. Awarded Commencement Program Certificate of Graduation June 1, 2025	

Source: Weill Cornell Medical College in Qatar Admissions Brochure, 2006.

Educational recipients – the WCMC-Q student body

Far from being a homogeneous group, WCMC-Q medical students differ greatly in terms of their individual dispositions, socio-economic circumstances and previous academic trajectories. The principle subjects of this dissertation, however, are those who self-identify as Arab/Muslims and who arrive at the university having been educated in traditional Arabic-medium schools.

Each medical class consists of 102 students on the NY campus and up to fifty in Doha. WCMC-Q students are predominantly from the Arab world, primarily from the Gulf. More than three quarters of the students graduated from secondary schools within the Gulf region, almost half of which were actually located in Qatar (48%). Ten percent had completed their secondary education in the Near East, the remainder having attended schools internationally (12%). Results of a survey that I conducted revealed the following data: Seventy-six percent of the students identified themselves as Muslims; with the same percentage reporting that upon graduation they will be the first doctor in their immediate (nuclear) family. Though many and varied, the reasons mostly commonly cited for attending WCMC-Q were as follows:

56% Proximity to family - “Basically because it is local and it is near my family and friends. My brother studied abroad and said it was difficult to adjust to another environment.”

44% Quality of the degree - “Because it’s an excellent university in an Islamic country. It is accepted worldwide. Cornell is Cornell.”

30% Confers a US degree - “One of the top American universities but it’s not in the US. The culture here is familiar and it is close to my family.”

12% Located in the Middle East - “I wanted to end up in the Middle East because it is more towards my culture. It is Islamic and conservative.”

10% Restrictions on travel - “I didn’t have the US as an option. I wanted to do an American degree, but my parents didn’t want me to go to the US away from my family”; “Because my family lives here in Qatar and because my only other choice was Egypt (my dad wouldn’t allow me anything else)”; “My parents were reluctant to let me go to the US after 9/11.”

People located outside of the college echoed many of these sentiments, for instance, a senior consultant at HMC acknowledged that “it is better to have our children get a quality US education while remaining in their culture.”

Students who choose to attend WCMC-Q represent a wide array of educational backgrounds summarised in Table 4.

Table 4: Educational Backgrounds of WCMC-Q Student Body

A) Local student International faculty International curriculum English-medium instruction I.e. American, British or International schools	C) International student International faculty International curriculum English-medium instruction I.e. foreign students; CORNELL
B) ↙ Local student Local faculty Local curriculum Arabic-medium instruction I.e. Arabic schools – State schools	D) International student Local faculty Local curriculum Arabic-medium instruction No examples at WCMC-Q

Approximately one quarter of the medical students were educated at Arabic-medium schools (Quadrant B), and this group were the main focus of my study (Appendix C). For the purposes of comparison, I also interviewed the remaining Qatari students who had been educated in English-medium schools. While all students experience difficulties in their transition to medical school, the acculturation process is

especially difficult for those in Quadrant B who arrive at the college without training in essential cognitive skills such as critical thinking, study skills and language proficiency and are therefore, initially ill equipped to cope with the demands of a “curriculum that emphasizes active learning, self-directed inquiry, and small groups rather than lectures” (WCMC-Q 2010). Further, students originating from state schools tend to be more conservative, particularly when it comes to issues of religion, familial obligations, views on marriage, dress, authority, piety and interacting with the opposite sex; issues that regularly come to the fore in the academic and clinical settings.

Before proceeding, I would like to offer up a prolepsis regarding my ubiquitous use of the terms “tradition” and “modernity” as they relate to Qatari society. Despite the fact that modernisation theories have largely been abandoned, the modernity/tradition dichotomy has persisted due to its classificatory efficacy. Their continued use as categories endures even though the meaning of each word is dynamic. For instance, anthropological studies involving religion (e.g. Hirshkind 2001; Eickelman 1992) – an institution usually assigned to the realm of tradition – have shown the domain’s capacity to respond to change through reinvention and adaptation. Yet at the same time, several of the students who regard their training as contributing to their respective countries’ modernisation efforts are the same students who are transported to the medical school in chaperoned vehicles, or don gloves and niqabs,⁹ or are vocal in their objection to a sister attending the same coeducational institution.

My research – based entirely on English-language communication – reveals that terms connoting modernity and tradition are emic categories within the Qatari context. Many of my informants used the adjective “traditional” interchangeably with words such as “conservative”, “old fashioned” and “Bedouin”, and in so doing, conveyed a sense of backwardness or outmoded practices. This use of semantic substitution is indicative of students’ tendency to temporally differentiate, meaning that they attribute long-standing attitudes and some modes of practice – particularly

⁹ Niqabs are veils that cover the entire face apart from the eyes.

as they relate to the field of medicine and differ from what they learn inside the medical college – as outdated and thus in need of modification. As actors who opted to attend a pioneering coeducational institution, many of the students at the American college consider themselves somewhat avant-garde; “progressive” and “modern” compared to their contemporaries at Qatar University. A few students pointed out that their “being there” (WCMC-Q) at all was indicative of the fact that they came from fairly liberal, open-minded and/or progressive families keen to embrace the future. Their enrolment in an exogenous academic institution undoubtedly shapes their respective notions of modernity given that their spheres of reference include “forces and influences whose economic and cultural epicenters often lie far outside the local, the familiar, or the domestic” (Fahy 1998: 28). Thus their academic experience, specifically designed to emulate a pedagogical system located elsewhere, provides the physicians-in-training with unprecedented exposure to the metropole and all that that entails.

However, the broad spectrum of students attending WCMC-Q makes me wary of providing a definitive definition of “modernity” and “tradition”. This is because one’s interpretation of these terms is contingent on the individual’s perspective, influenced as it is by his/her family, religious beliefs, education, gender, personal circumstances and disposition. What is more, the student population does not represent a large enough sample or cross-section of Qatari society to draw any solid conclusions about how people use these words in reference to processes, behaviours and attitudes beyond the context of the medical school and the experiences that occur there. Instead, it seems that rather than possessing fixed meanings, the terms are in flux and subject to contestation.

State of the field

A medical training anywhere involves dramatic cultural challenges. A visiting dean from NY pointed out that both the American and the Qatari cohorts of students experience the “same anxieties, at the same stages, in both places.” This concurs

with my observation that many of the issues and practices chronicled in earlier medical ethnographies mapped directly onto those experienced in medical school in Qatar (e.g. the inculcation of a medical habitus via the acquisition of specific dispositions and linguistic proficiency in “doctorese”). Prior to entry to my field site I was heavily informed by studies of medical training in the West (Sinclair 1997; Good and DelVecchio Good 1993; Becker et al. 1961; and Merton et al. 1957), so I was continually on the lookout for similarities and discrepancies between the medical school experience in Qatar and that found in the UK and the US. Divergences were of particular interest as they were often indicative of incongruities arising between the mores, values and expectations of the American institution in the non-American setting.

Sharing with earlier medical ethnographies a common object of analysis – a “Western” medical college – my research is new in studying a US medical college situated in an Arab/Islamic culture. In considering an American medical school as experienced in a non-American context a comparative analysis lies more squarely with transnational universities than medical colleges per se. Although this research contributes to a growing body of literature on medical education from an international perspective, my monograph was never intended to be a medical ethnography, but rather a contribution to the anthropology of education in the form of a case study of transnational education. In other words, it is an exploration of how exported (or imported depending on one’s perspective) education looks and functions on the ground. During my fieldwork I documented the process of producing American-styled doctors in a non-American setting with a view to exploring issues that transpire in the globalisation of higher education through the construction of a global knowledge space. That my research was conducted in a medical domain is significant in that the doctor-patient relationship necessitates intimate social connections and that as physicians-in-training, students are required to engage with patients in ways that transcend normal propriety. Medical practitioners, under the mantle of the clinical encounter, are privy to things that people outside of the profession are not. In their quest to help patients, student-doctors are able to broach

questions of a personal nature and probe bodies in a highly intimate manner. In so doing, their medical training serves as a prism through which social, academic and clinical disconnects are highlighted.

Despite the paucity of ethnographic research, it is worth reviewing how anthropologists have addressed tertiary education thus far. While there are a number of well-documented ethnographies of Quranic schools, secular education in the Islamic world has received little attention, while higher education, including the professional training given in universities (particularly outside of North America and the UK) has been orphaned by scholarly literature. That advanced education has commanded so little attention from anthropologists is curious, given the social nature of these complex urban institutions, their capacity for knowledge transfer and their function as mechanisms for cultural transmission. This literature review is focused only on the discipline's engagement with higher education in the Arab world and elsewhere. I will address the literatures dealing with globalisation, assemblages (Chapter 2), transplantation (Chapter 3), neoliberalism, zoning and graduated sovereignty (Chapter 4), ICTs (Chapter 5) and emergent forms of life (Chapters 6 and 7) as they arise in the text.

As universities come to be identified as untapped reservoirs for anthropological research, a number of themes are beginning to emerge. The transformative impact of higher education features prominently in the literature (Moffat 1989; LaPeyronnie and Marie 1992; Kurtz 1994; Fahy 1998). LaPeyronnie and Marie argue that this is because, "the university imposes its own rules and possesses an internal life that fashions the student experience. This translates into comportments affecting domains of life that do not comprise just their studies" (1992: 10 [my translation]). Similarly, Fahy argues that an academic habitus acquired at a university based on a Western prototype does not transition as readily into the Moroccan socio-political milieu because:

Many of the social skills learned or cultivated in the university environment do not conform or even openly clash with the manners of most of what might be termed middle-income Moroccan families... what takes place within the university does not integrate easily, and even at points fosters tension with, its social context (1998: 12).

These anthropologists regard the university campus as a locus of conflict, contestation and transformation owing to the contradictions arising from the nexus of institutional cleavages and social issues such as identity, gender, regionalism, and economic and political configurations.

Religious activism at universities is also prevalent in the ethnographic literature (Eickelman 1992, 1999; Starrett 1998; and Cook 2001).¹⁰ Both Eickelman and Starrett document how Islamic tradition is being altered due to the proliferation of public education and mass media in the Arab world. Eickelman's (1992) seminal work on "mass higher education and the religious imagination" in Islamic societies is perhaps the most renowned anthropological study of contemporary universities in the Arab world. In this article, he examines the relationship between the rapid expansion of post-secondary education, religious activism and the promotion of "objectified religious knowledge" within these institutions. To this end, Eickelman looks at the communication networks and conduits of religious activism that the advent of mass higher education has produced in Egypt, Morocco and Oman. He contends that within these Islamic contexts, higher education, owing to its "structure", assumes the dual functions of endorsing traditional values, beliefs and authoritative discourse while simultaneously engendering "new 'authoritative' ways of thinking about self, religion and politics" (1992: 645). Eickelman explores how the rise of mass education combined with access to information through mass communication technology is leading to greater autonomy in Muslim-majority societies and how new university-educated actors are beginning to challenge traditional authoritative sources of knowledge.

¹⁰ Cook's work focuses on the "Islamization" of education.

Corresponding to Eickelman and Starett's observations regarding the introduction of new ways of thinking and the legitimisation of knowledge, Lerner (2008) looks at the implications of borrowing exogenous pedagogical forms. Her fieldwork at the European University in St. Petersburg underscores the tensions surrounding the legitimacy of scientific knowledge as the institution attempts to "teach [its] students to do science like in the West" (2008: 187). She enlists the term "mimesis" in reference to cultural flows and global shifts in knowledge during the post-Soviet period. Lerner rejects assumptions of cultural homogenisation of higher education, asserting that predominant "cultural models" in play at the university exist *in tandem* with a new global academic habitus (2008: 187). She demonstrates that accessible cultural models entrenched in society play important roles in the creation of new models as well as in the reproduction of long-standing academic practices. Lerner contends that because of the influence of cultural repertoires, "the product of a mimetic process is never a complete replication or reproduction. Rather, mimicry creates an object/subject that is "almost the same, but not quite" (2008: 191). I suggest that my use of "transplantation" closely corresponds to Lerner's use of mimesis as an analytical concept in that both pay attention to the relocation, local reception and adaptation of scientific educational imports.

Although there is a significant corpus of anthropological literature dealing with globalisation, it is only recently that anthropologist Aihwa Ong has explored this topic through the lens of education. She considers how the "increasingly global availability of American education" – particularly that of business education – is generating a transnational circuit of higher education designed to promote American business culture (Ong 2006: 148-9). Ong's work on tertiary education in Asian contexts and her ideas of "global assemblages", "graduated sovereignty" and "flexible citizenship", provides important points of comparison as I examine the selective deployment of neoliberal reforms in Qatar and local workings-out of a "knowledge-based economy". Beyond Ong's work, however, the impact of globalisation on tertiary education or professional training is both under-studied and under-theorised (Marginson and Rhoades 2002: 281).

Anthropology has so far had rather little to say about the development of secular higher education in the Middle East or the impact of globalisation on tertiary education. I found it helpful to look beyond the field of anthropology for literature dealing with universities in the Arab world and their intersection with global forces (e.g. advances in science and technology; redistribution of knowledge, wealth and power; and growth of consumers in emerging economies).

Beyond anthropology

The medical sociologist, Gallagher (1993; 1989; 1988; 1985) produced several articles about a newly established medical college in Saudi Arabia that had adapted a Western model of medical education. Noting developing nations' uptake of medical education programmes that resemble those found in the West, Gallagher posits the Saudi Arabia case study as a to challenge the convergence hypothesis. While acknowledging that a medical education package can successfully be imported on the grounds that the "cognitive core of biomedical science was the same as that found in the Western model", Gallagher demonstrates how in the Arab context, the educational process is impinged on by a number of factors intrinsic and extrinsic to the medical programme (e.g. fluency in language of instruction, familial obligations). As the trend to borrow non-indigenous training packages continues, Gallagher's appeal for studies "drawn from other societies in order to formulate a systematic framework for comparison" (1988: 385) remains largely unrealised, but remains more important than ever.

Donn and Al Manthri (2010) focus specifically on the impact that the importation of educational programmes has on the Arab Gulf states that rely on this strategy. They claim that the consumption of a "baroque arsenal" of pedagogical products from the West allows the producers to benefit on two accounts; the money they receive for their outmoded/second-hand programmes is then reinvested in generating new

knowledge that can be sold on again. They suggest that this borrowing undermines capacity building and impedes production of an indigenous knowledge economy.

Of particular relevance are the studies of geographers Olds (2007) and Olds and Thift (2005) who have written extensively on the denationalisation of tertiary education and territorialised knowledge spaces within the Pacific Rim. Their research on Singapore's Global Schoolhouse and its linkages with Western universities examines the factors underlying the emergence of Singapore as "global education hub". In documenting the Singaporean state's objectives and strategies, institutional structures and use of technologies, their work provides a vital comparative landscape for my own research, especially with regard to the nation state perspective.

Downplaying the standpoint of the state, Margison and Rhodes propose instead a triangular conceptualisation of globalisation, which identifies "three intersecting planes of existence, emphasizing the simultaneous significance of global, national and local dimensions and forces" (2002: 282-283). This useful tripartite formulation serves to highlight the multiplicity of perspectives through which globalised education is experienced or examined. While much of the literature dealing with globalisation and tertiary education focuses on nation states, their work foregrounds the local dimensions of experience associated with burgeoning pedagogical forms. As it stands, we know little about those engaged in transnational forms of education and I aim to rectify this if only in a limited manner. In looking at the micro-dynamics of transnational tertiary experiences, I hope that my work will respond to Margison and Rhoades appeal for research that:

...attends to local response and reality, explores local institutions, and considers local practices. More than that, we need to study how local actors and institutions extend their activities to the international stage...[and examine how] local universities and departments move in international circles, not just subject to international forces, but [as] subjects that exercise influence regionally and globally (2002: 286).

With the exception of those mentioned above, post-secondary education as it exists in the Arab world has yet to be studied systematically by anthropologists. My research at an American university situated in the Middle East aims to fill this gap.

Methods

I undertook two years of anthropological fieldwork in Education City in Doha, Qatar between 2006 and 2008. I was stationed at WCMC-Q for most of this time, and my fieldwork coincided with the academic year that culminated with the graduation of the inaugural class of medical students. This timing enabled me to witness many critical events and historic moments in the evolution of the nascent transnational institution.

Due to a number of restrictions imposed on my research (detailed below), I privilege the medical student narrative over the myriad of actors involved with the college as they are the primary beneficiaries of the educational transplant. The chapters that follow explore the conditions that emerge in a transnational education venture and how students come to think about education and medical practice, especially in light of activities they are exposed to in their journey to become ‘American-style’ doctors.

Perhaps contravening expectations, although gender status and religion comprise much of the literature involving the Arab world – to the extent that these preoccupations occasionally eclipse other facets of social life – I have opted to omit stand-alone chapters on these subjects. Since most studies of higher education in the Islamic world have singled out gender and religion and treated other important issues in filigree, I have decided here to highlight other themes while recognising in my detailed analysis in each section that considerations of religion and gender are always germane to my subjects. While these topics are necessarily interwoven into the broader discussion dealing with science education in this particular social milieu, I have elected instead to focus on other pertinent and significantly under-researched themes that participation in a global educational model brings to the fore.

Sources

QF and WCMC-Q/NY have gone to great lengths to promote their respective institutions' development and achievements. Both organisations have spared little expense in generating an impressive array of institutional artefacts in the form of press releases, interactive websites, Facebook groups, glossy magazines, newsletters, posters, organisational charts, annual reports, yearbooks, promotional DVDs and CD-ROMs. Readily available in the public domain, the content and aesthetics of these documents provided invaluable sources of background information pertaining to the activities occurring in Education City.

Similarly, the novelty of Education City meant that its inception, growth, activities and success in attracting an impressive network of actors and globally-recognised institutions and multi-national companies to its campus has attracted much media attention. The local, national and international press and media have produced an impressive archive of articles, reports and documentaries about the educational enterprise. In addition, as a developing nation, Qatar and its health care and educational initiatives have been the subject of numerous reports produced by international agencies and NGOs (e.g. Rand-Qatar Policy Institute, World Bank, UNESCO). A state archive does not exist in Qatar and the National Library's small haphazard collection was largely outdated. However, the official websites of the Ministry of Health and the Supreme Education Council provided limited digital access to online archival data.

Access

My first point of contact in the field was through a relative who held a deanship position at WCMC-Q and who was personally familiar with each of the key figures in the academic community of Education City. Keen to avoid either charges of nepotism or causing offence to his Qatari hosts, this individual hand-delivered my

research proposal to QF Chairperson Her Highness Sheikha Moza bint Nasser and the Board of Directors. Conscious of the hierarchical structure of Qatari society, I assumed that a top-down approach would be the most appropriate way to negotiate my access to Cornell and Education City. I was also working under the presumption that QF would perhaps be most sensitive to the research as it was intimately connected to their domestic education system.

Having rented out my Glasgow flat, entrusted the care of my twenty-one year-old cat to friends and convinced my husband to postpone his legal traineeship to follow me out to the desert, I arrived on Cornell's doorstep only to be asked incredulously, "Who are you?" and, "You are here to do what?" Conscious of following correct channels and proper protocol, I had sent my request to conduct research to QF, the umbrella organisation that Cornell is partnered with. I had mistakenly assumed that having a letter from HH's Board Management Office endorsing my fieldwork would mean (on account of its being a collaborative venture and the endorsement letter being copied to the Dean of WCMC-Q) that QF would have been, from the onset, in direct contact with Cornell negotiating access on my behalf. The reality was, however, that QF had unilaterally authorised the research and in doing so had undermined Cornell's institutional autonomy. This was problematic as Cornell could hardly refuse access to "Her Highness's Board Management Researcher" (the title on my identity card that had to be worn inside Education City), yet they were reluctant to have someone from outside WCMC-Q scrutinising their transplanted programme. As the first researcher ever to be sponsored by QF, my arrival in Education City generated a lot of political strife and confusion. What followed were a series of independent meetings with the Dean of WCMC-Q and several persons from the upper-echelons of QF who were keen not to jeopardise their relationship with their reluctant partner, Cornell. Two months after my arrival, I was summoned to attend a rather intimidating, albeit pivotal meeting with the Vice Provost and Executive Vice Dean of the Medical College and the Executive Vice Dean of Research who had flown in from NY.

Convened around one end of the expansive wooden boardroom table, I explained to the visiting deans my intention to look at knowledge transfers that occur as the degree is transplanted from NY to Doha. On the grounds that WCMC insists the programme being delivered in both locations must be identical, the curriculum could be considered a constant, thus highlighting any differences in goals, experiences and reactions on the part of the two student populations. I outlined my plan to compare how specific theoretical and practical tasks are taught to the NY and Doha cohorts. The main ethnographic subjects would be the degree itself and the technologies that facilitate its transfer, along with the faculty and students. The deans informed me, however, that they, “were reluctant to recommend a study if it wasn’t scientific,” and “would not support reviews of the medical school curriculum either through serendipity or opinion.” One of the deans was quick to point out that the professors already handout questionnaires to evaluate the effectiveness of their teaching. He questioned what I could offer Cornell that it did not already know. I pointed out that the quantitative (ergo “scientific”) feedback might be complimented by qualitative research, a useful means of elucidating people’s tacit views, opinions and attitudes.¹¹ I acknowledged that while anthropological research is temporal in nature and thus not replicable in a scientific sense, that it would be a useful approach through which to explore the cultural and social angles associated with the introduction of a Western knowledge package. As I was stating my case, I found the dean sitting to my right nodding his head in support. When I concluded my desperate spiel, the sympathetic dean concurred with his colleague that qualitative research had always been a problem associated with the social sciences,¹² but agreed that it could provide a different type of perspective and generate interesting information. They encouraged me to concentrate on gender and cultural angles instead of the “ho-hum curriculum”. Strongly encouraged to discard my comparative analysis of the curriculum, I took their advice and focused exclusively on what one bespectacled dean suggested in a

¹¹ For an interesting explanation of anthropology’s capacity to reveal “blindspots” in objective scientific evaluation see Stefan Ecks’s study of evidence-based medicine (2008).

¹² Helen Lambert observes that within the discipline of anthropology, what constitutes evidence remains largely inexplicit, and that this reluctance to tackle evidence impedes communication with scientists for whom objective proof is tantamount (2006: 2641).

broad NY accent would invariably prove to be a “goldmine of information” – namely the social/cultural angles of the educational transplant.

Thus, the outcome of the “3-Deans meeting” was that I removed the “epistemic” component from my research and focused exclusively on local reception of the American medical model and its broader cultural implications. The revised objective of the research was to examine the process of enculturation experienced by Arab students as they undertook an American medical degree. I was informed that in order to conduct any form of research at the medical college, I would be required to obtain an online Health Insurance Portability and Accountability Act (HIPAA) certification and that Institutional Review Board (IRB) approval would be necessary prior to conducting any research in the medical college. IRB approval would ensure that my research was compliant with US Federal and NY State regulations governing human subject research. As there was no IRB at the time in WCMC-Q,¹³ the protocol application, referred to as a “Request for Expedited Review of Investigation Involving Use of Adult Human Subjects” was submitted to the IRB in NY.¹⁴ The revised proposal was reviewed by the Committee on Human Rights in Research and the NYPH-WCMC Institutional Review Board (IRB). This official circumscription points to how Cornell perceives the risks involved in transmission of their academic programme (even if they must not be openly acknowledged) and highlights the politics of globalising education. Even though I was not permitted to pursue certain lines of enquiry (notably how epistemological challenges worked out in the classroom or lab), I learned quite a lot about these issues from other, less formalised sources of information.

In his ethnography of a British medical school, Sinclair states that:

¹³ A formal IRB panel now exists at WCMC-Q. An onsite panel, familiar with the cultural peculiarities of Qatar, will no doubt prove more effective.

¹⁴ Though not relevant to my anthropological research, the application included sections on Human Tissue collection, radioactive materials, recombinant DNA and gene therapy.

The practical business of gaining access to a medical school gave immediate reminders of some central features of the institution...[his] proposals and methods were not specific enough for the anatomists... [and functioned as a] reminder of the difference between natural and social sciences (1997: 7).

I found that the IRB process required me to bureaucratised and delineate my fieldwork, framing it in terms acceptable to the scientific community to which I was seeking entry. In hindsight, however, the five-month process of negotiating access to the medical school and of being subject to the arduous IRB process were highly informative in respect of what happens when US medical bureaucracy (e.g. ethics, political correctness) meets Arab-style officialdom (which has its own agenda, socially and culturally speaking).

The intervening period, during which I lived in an all-girls dormitory (comprising students from various universities in Education City) and occupied an office in the Education Division of QF, was equally informative. My living and working arrangements facilitated use of the “snowballing” methodology to develop a network of actors throughout Education City. Here I was able not only to gain a broader understanding of the dynamics of QF and Education City, but also to hear what outsiders had to say about WCMC-Q. Cornell’s perceived reluctance to participate in whole campus forums, collaborative research and activities fostered an impression that the institution had adopted an isolationist approach to Education City.

Only after the IRB panel officially approved my research was I able to gain entry into Cornell. An electronic letter of introduction with a synopsis of my research plan, my credentials and IRB authorisation was sent out to students and faculty by a senior-level dean in order to legitimate my presence. I used a combination of emails and personal visits to professors whose classes and/or laboratories I wished to attend. In a deliberate effort to distance myself from WCMC-Q administration and to

remove student suspicion (many thought I was an administrative or CIA spy),¹⁵ I found it necessary to produce a more informal pamphlet for the students providing additional personal information and to further explain my research objectives.

Data and methods

Neither quantitative nor qualitative studies on WCMC-Q students exist. Little, therefore, is known about their lives or their subjective experiences of American medical training. My ethnographic research was restricted to Gulf-based students in order to gain an understanding of how they acclimatise to the academic environment and how they cope with the ethical and social dilemmas encountered as they embody the American educational transplant.

Participant-observation was used extensively throughout the research. This qualitative research method involved the researcher's direct observation through prolonged immersion in the field site and active engagement in the routine activities of the medical students. Once students became less wary of my presence, I carried out an oral survey with every student enrolled in the Medical Program (bar one student who did not wish to be involved). Students participated on a voluntary basis. The survey seemed an apposite mode of data collection for the university setting.¹⁶ It enabled me to gather general statistics pertaining to each actor's nationality; religious affiliation; location and type of schooling; parental level of education; languages spoken; reasons for studying medicine; and reasons for opting to attend an American college. The results of the survey helped not only to delineate my target population

¹⁵ The notion of an anthropologist being synonymous with a spy is revealing in itself. When I asked why a spy might be stationed at WCMC-Q, a number of students mentioned that from Premed onwards they have been under close faculty observation. Though in the minority, a few students, particularly those who had grown up in places like Syria and Iraq, suggested that an American medical school might be "perceived by the West" to be full of impressionable young Arabs. One student, the recipient of an email from a journalist, stated that sceptics regard the establishment of universities in Qatar as an attempt to ensure that the Americans foster/brainwash pro-American sentiment thereby protecting US interests in the Gulf.

¹⁶ My initial consultations with the medical faculty indicated that they recognised the value of this form of quantitative analysis owing to it being perceived as being more "scientific" than qualitative data.

but also to gain a broader understanding of the student body. In addition, it afforded an opportunity to speak individually with each student and field questions about the type of data that I was collecting.

The student body of WCMC-Q is relatively homogenous in that more than seventy-five percent self-identify as Arab, Muslim, single, early twenties, native Arabic speakers from mid to upper-middle class sociocultural backgrounds. A few notable exceptions have parents who did not progress beyond primary education and are illiterate. Case studies of thirty-two students (Appendix C) of both sexes were obtained, comprising the entire Qatari student population in addition to all students who were educated in Arabic-medium high schools. Semi-structured interviews were conducted to provide the medical students with an opportunity to articulate tacit perceptions, feelings and understandings relating to their experience of the American medical degree. The same range of topics was covered in each interview. In accordance with IRB regulations, a signed consent form was obtained before conducting these interviews. All interviews were conducted in English (the language of instruction at WCMC-Q) and transcribed.

Open-ended interviews and casual conversations were also carried out with administrators, Pre-medical and Medical Faculty (Appendix D). At the conclusion of my fieldwork I had formal exit interviews with each WCMC-Q dean, the President of QF and my sponsor, the QF Chairperson (HH) (Appendix E). Due to the nature of these end-stage interviews, all informants waived written consent and were digitally recorded, with the exception of the last for which I only obtained permission to record the conversation in writing.

Other peripheral stakeholders included two senior hospital administrators, an HMC medical resident, two regionally trained HMC physicians (one Qatari), two Qatari students who completed the Pre-medical Program but were not accepted into the Medical Program, and the parents of one Qatari medical student. These actors' tacit perceptions, feelings and understandings of their direct/indirect involvement in the

Cornell educational experience provided useful background information which helped to situate WCMC-Q in a broader arena.

Virtual ethnography also features in my research. In addition to the online monitoring of a series of websites, I followed a number of blogs and discussion groups about the new medical college in Qatar. Invitations to engage with students and faculty via Facebook added unanticipated ethical and personal dimensions to my fieldwork. Although ethics committees at the University of Edinburgh and Cornell University approved my situated fieldwork, technically, my online interactions extended beyond the temporal and geographical limits delineated in my proposal. As the actors themselves initiated these encounters, and as they were under no obligation to continue communicating with me, I have continued to keep in contact with many of them. This has had the effect of bringing the field back home, as I have been kept abreast remotely (and near instantaneously) with what has been happening at my field site.

Within the youthful college setting, Facebook use was rife. Certainly at the beginning, participation in this virtual social network became essential as it helped me to cut across some of the age-related and gender dynamics (because it occurred in a private space) and to establish more casual relationships with a cross-section of WCMC-Q students. These virtual exchanges blurred the distinction between my role as a researcher and as a university student myself who could be investigated by my informants as it involved mutual disclosure of personal information.

Anonymity

Within this ethnography, wherever possible, I have attempted to anonymise the actors whom I interviewed and/or observed. Pseudonyms are employed and personal details have been altered to prevent actors being identified. Some key actors, however, are clearly identifiable because of their structural positions within various

organisations, namely those who hold leadership roles and who have chosen to comment officially in their professional capacity.

Cognisant of the potential ramifications that my research might have on the WCMC-Q project (e.g. garnering negative attention from the broader community through disclosure of activities occurring within the medical school, sensational publicity), I have been careful not to compromise the educational initiative by jeopardising the reputations of the participating institutions. However, owing to the small and distinctive geographic region and the unprecedented educational trajectory being pursued, anonymisation of the fieldwork site was fraught with difficulties. Further, the inclusion of specificities relating to the social context (e.g. historical and economic contingencies) is fundamental to the analysis being developed. Thus, institutional identities are revealed from the onset.

Informants and relationships

At Cornell, I was allocated an office in the Pre-medical Department. I had the fortune of sharing this space with a Foundation Program teaching assistant who had recently graduated from Cornell in Ithaca and who was in the process of reapplying for the Medical Program at WCMC-Q. My office was situated in a corridor where I had many opportunities to engage with both faculty members and students. I was also granted an electronic identity card that allowed me access to most areas of the building, including the faculty lounge and all student areas. Such freedom of movement meant that I was able to establish relationships with administrators, Pre-medical and Medical faculty as well as the Foundation, Pre-medical and Medical student populations.

Building trust was pivotal in the establishment of relationships at WCMC-Q. Depending on one's perspective, however, my personal association with HH and two deans in particular – one who was listed as the Principal Investigator in the IRB and another with whom I had a familial connection – either hindered or facilitated my

exchanges. It was only when I began to identify myself as an independent researcher that I was able to assuage fears and began to make progress on this front. Attending social events outside of the institution also helped in this regard.

As many students were convinced that they were under constant surveillance at the medical college, initially they were sceptical about my motives for being there. One student helpfully suggested that if I put away my notebook and joined the online social network, Facebook, I might gain the students' trust, which I promptly set about doing.¹⁷ I also noticed that my style of dress, hairstyles and possession of the latest technological accessories (i.e. a trendy mobile phone, the latest MacBook and iPod nano complete with iTalk digital voice recorder) "bought me some street-cred", reducing the age-differential and thus had a significant impact on my rapport with students. This was consistent with my observation that when I wore the ¾ length white lab coat that professors wear in the anatomy lab, my engagement with students was minimal. When I dressed like the students in scrubs, however, students actively sought me out during lab sessions to show me anatomical curiosities or to participate in casual conversations that occurred during dissection.

Positionality

Originally, I had planned to accompany the students to NY to gain a more holistic understanding of their transnational medical school experience. Unfortunately, this facet of my research was not approved by the IRB and everything that I learned of student experiences abroad (for most this was their first solo trip and for many it was

¹⁷ Students chastised me about my first attempt at producing a Facebook profile on the basis that my virtual persona did not share enough personal information with them. This is when I realised that Facebook provides a useful and reciprocal platform for information exchange. I was initially confronted with the dilemma of what to include in my profile, especially on account of the Islamic context (e.g. should I post photographs with images of me imbibing?). In the end, I opted not to censor what I posted on the basis that the students were able to view me more as a contemporary – faults and all. This sentiment seems to have been appreciated as I now have 88 students (current students and recent graduates), 9 professors, 6 teaching assistants and 4 staff members of WCMC-Q as Facebook friends, the vast majority of whom initiated the connection via a "friend-invite". As a result, I have used Facebook extensively as a mode of communication with my informants both during and after my fieldwork.

their first trip beyond the Gulf region) has been gleaned through Facebook and email exchanges during their absence or conversations subsequent to their return.

Instead, I spent two years doing fieldwork in Qatar, nineteen months of which took place inside WCMC-Q. My time was divided relatively equally between the four year groups and was structured around the academic calendar (i.e. when third years were in NY on subinternships, I spent time with the fourth years who had returned to college for a clerkship in Public Health).

There is no question that my own identity as a middle-aged, married, childless, North American, Christian, Caucasian female social scientist has shaped the dynamics of my encounter and subsequently impacted my account. In this gendered Arabic and Islamic environment, a male ethnographer might well have produced a significantly different monograph. I lived in a female dormitory that housed most of the female medical students who resided on campus. This living arrangement enabled me to experience and observe facets of student life beyond the bounds of the medical school proper. Yet an obvious limitation is that, due to social propriety, being an “outsider” in various respects – meant that full participation in certain facets of private life was severely limited. This situation was compounded by my not being a fluent Arabic-speaker, which further impeded my complete immersion in the world around me.¹⁸

Thesis organisation

The thesis introduces the language of “transplantation” as a heuristic tool through which the globalisation of higher education might be explored conceptually. What follows is an ethnography of an emergent educational transplant propagated in a globalised era which explores novel modes of knowledge transfer, institutional and social arrangements across local and transnational boundaries, changing

¹⁸ At the beginning, my linguistic ineptitude provided a good excuse to recruit medical students as personal Arabic tutors (fostering informal relationships) and functioned as an unending source of humour for my WCMC-Q peers as I grappled with the new language.

subjectivities and the generation of new life forms. In a sitting of the Islamic world, WCMC-Q provides a strategic site for observing the dynamics of a nation and its people grappling with modernity. Through its production of American-style doctors in a non-American setting, I will use Cornell's transnational medical school as a niche to explore the tensions that arise in global models of tertiary education. In the coming chapters I test its claims to universality and the hidden package of neoliberal values it enfold.

Chapter 1 provides an overview of the historical and socio-economic backdrop against which WCMC is situated. The second chapter focuses specifically on globalisation and its influence upon higher education. This includes an overview of the objectives, processes, institutional structures, practices and technologies that are supporting the propagation of globalising universities. The chapter posits the institution as an "anthropological problem" that can be probed by treating WCMC-Q as a global assemblage.

Chapter 3 critically unpacks the transplant metaphor, providing both the rationale behind its use as well as highlighting the limitations of the surgical/agronomic metaphor. The transplantation procedure provides a useful parallel for outlining the processes involved in the recruitment and establishment of the foreign pedagogical programme.

The importation of exogenous tertiary educational models marks a distinctive development path from that of the national university. The recent expansion of higher education in Qatar points to new national priorities and the pursuit of a neoliberal agenda, all of which are shaped by the conditions of an increasingly globalised world. Chapter 4 maps out how Qatar's objectives are imagined, coordinated and constructed in the ever-more interconnected network of academia. To this end, the intersection of economies, bureaucracies, state and institutional entanglements will be explored, as will the negotiations and implementation of zoning strategies employed in the establishment and governance of the college. The

creation of an ambiguously separate zone for the medical school seems analogous to a troublesome, yet essential, transplanted organ.

Attention shifts in the section that follows to that of the new forms and subjectivities propagated by educational transplants. Chapter 5 explores how the distinctive configuration of presences and absences impact the educational programme and examines new pedagogical practices that emerge from these global academic assemblages. The concluding chapters consider the individual experiences of Arab medical students attending the American university and how cultural logics surrounding gender, language, identity, faith, academic freedom, ethics and notions of professionalism are negotiated in academic and clinical spaces. I show how the American medical college environment exacts concessions from its recipients and brings about a number of quandaries for its non-American students, focusing especially on their contested, and at times contradictory notions of identity. Here I contend that the medical students' transnational professional training is at times, structurally predisposed to be at variance with not only clinical practice, but also their daily interactions with their immediate Arab and Islamic communities. Instances of dissonance can be attributed to specific components of the US medical training and certain expectations embedded within the American college experience. As would be expected, during early stages of setting up the medical school, it was possible to detect a disconnection between the exogenous institution and the social milieu in which it was attempting to transplant itself. The identities of students enrolled at WCMC-Q, like those of the Moroccan university students documented by Fahy, are equivocal because they are bound up with and:

...simultaneously beholden to institutions, modes of authority or conceptions of the self [that are of] radically disparate provenience that have not been fully reconciled or homogenized...where people's lives and identities are interpolated simultaneously by institutions and forces different in scale, origin and kind (Fahy 1998: 30).

It is, however, important to remember that this particular model of professional education is as yet, still a pioneering, "educational experiment". With this in mind,

one would be remiss not to expect a number of discrepancies to surface as the transplanted university programme becomes rooted in its foreign environment.

Chapter 6 addresses how students' self-perceptions are altered as a result of the educational experience at an American medical college. Emphasis is placed on the perceived tensions and contradictions students experience as they encounter both local and supralocal norms, expectations and practices within the sites of their medical training. It focuses on the range of transformative shifts that an American medical training effects with regard to identity and social worlds (e.g. language, notions of propriety, sexuality, ordering of time, religious beliefs). How the medical students negotiate differing requirements and at times incongruous social domains is central to this chapter. Students' invocation and incorporation of Islamic beliefs and modes of practice as orienting mechanisms within the medical school setting are pertinent to the discussion. Ethnographic vignettes taken from structured interviews reveal the ways in which some students embody their medical training, reconfigure their notions of selfhood and assuage their conflicting domains of experience.

The challenges faced in clinical encounters – and by extension – in encounters with broader Qatari and Gulf society constitutes the seventh chapter. The discussion here is cast in terms of how the exogenous educational package maps onto clinical practice in the Arab/Islamic setting. Also addressed is the nature of these students as emerging professional subjects. The extent to which their foreign medical education is taken up and worked into the fabric of clinical practice and how this involves calculating what constitutes authentic modes of practice within the Qatari health care setting is examined.

My conclusion returns to the metaphor of the transplant to consider how effectively it has worked as a heuristic and revisit how my study contributes to our scholarly understanding of the globalisation of education and the local manifestations of neoliberalism. I conclude that the much-understudied domain of globalising post-secondary education constitutes a new and important sphere of ethnographic

investigation in its own right on the basis that the nexus of globalisation, the rapidly transforming realm of higher education and associated social entanglements merit closer scholarly attention.

The recent and prolific establishment of exogenous institutions of higher learning in Qatar – complete with their assemblages of local and supralocal agendas, modes of practice, networks of actors, not to mention the degree of innovation initiated as a result of their arrival – have incited a number of societal fissures. As these American universities attempt to implant themselves in a foreign social landscape, questions pertaining to the success or indeed the viability of such educational grafts arise. The status of one such transplanted institution, its integration into the Arab/Muslim community, and the subjective experiences of its new student body are explored in subsequent chapters. It is my hope that this contemporary case study of a global educational programme demonstrates that universities are in and of themselves, complex, urban institutions worthy of study.

CHAPTER ONE

The Qatari Context

In order to contextualise the educational reforms being undertaken in Qatar, it is necessary to understand the Qatari context, particularly that of the capital city Doha, the locus of Qatar's power (i.e. financial center, seat of government). Overviews of Qatari history, politics, economy and demographics provide substantive information pertaining to the circumstances and traditions that are currently impacting the educational domain.

Flanked by Saudi Arabia and Iran, the small peninsular state of Qatar is noted for its strategic position in terms of world politics, its oil and gas reserves and its autocratic but benevolent leadership. Its flat and barren desert landscape, measuring 11 427 square kilometers is occasionally interrupted by undulating sand dunes (Brewer 2007: 7). The temperature ranges from 25 to 49 degrees Centigrade (ibid). Qatar has a population of 1.6 million (QSA 2011), the majority of whom live in cities and towns dotted along its extensive coastline.

History

Qatar has transitioned from a tribal and nomadic society to a modern state over the course of a few decades. The three indigenous tribes of Qatar were the Al Musallam, Maad'hid (later known as the Al Thani) and Al Bu Hossain (later referred to as Al Bu Aynan). Yet, most Qataris trace their ancestry to one of two waves of migration (Winckler 2000). The Jalahima and Utub tribes migrated from the Al Hasa region (present day Saudi Arabia) and the region now known as Kuwait during the 1760s. A few Qataris trace their lineage to Omani tribes who also migrated around this time. The second wave of migration occurred during the late 1700s, a time that coincided with Wahhabi expansion. The majority of Qataris are Arabs, virtually all of whom are Muslim, most of whom are Sunnis and followers of the Hanbali school of law

(Economist Intelligence Unit: 2004). Though relatively liberal and progressive in comparison to Saudi Arabia, Qatar represents one of the most conservative and traditional societies in the Arabian Gulf, where Wahhabism, a strict interpretation of Islam prevails and camel racing and falconry have long constituted national pastimes.

Qatar was established as a British protectorate in 1868 during which time it surrendered its autonomy over foreign affairs. At this time, the population was largely nomadic. In order to protect trade routes from the Gulf to India, the British signed treaties with tribal leaders to curb piracy. Qatar remained under British protection until 1971 (US Library of Congress 1994).

Qatar signed a concession agreement with the Anglo-Persian Oil Company in 1935. Oil was discovered four years later but was only developed the following decade (Cordesman 1997). Fueled by oil proceeds, the 1950s and 1960s marked a period of unprecedented prosperity, social development and an influx of immigration. During this period Qatar began to invest in public services and infrastructure such as schools, a hospital, a power station and a water-supply grid (Crystal 1990).

Leadership and government

After gaining independence, Qatar joined the UN and the Arab League. Qatar was established as an emirate whereby the provisional constitution conferred full legislative and executive powers to the Emir, the head of state. The Emir is duty-bound to govern according to the Islamic principles of fairness, generosity, honesty and mutual respect (US Library of Congress 1994). Since Qatar's first encounters with the British, all rulers have descended from the Al-Thani family. Sheikh Khalifa ruled as Emir of Qatar from 1972-1995, when he was overthrown in a bloodless coup by the heir apparent Sheikh Hamad Bin Khalifa Al Thani. Sheikh Hamad's progressive vision for Qatar's future is markedly different from that of his father's.

He is striving to modernise the conservative Islamic society from the top down via royal decree.

Qatar's political system recognises the authority of a small band of elites closely related to the Emir who wield a monopoly over decisions pertaining to the state. The Emir's reforms are supported primarily by influential members of the ruling family along with a host of academics and intellectuals. I have yet to find an adequate term to describe the diverse modes of governance used in the Gulf States. Qatar is perhaps best described as a form of monarchical (or depending on one's perspective, benevolent) authoritarianism. While there are limited forms of Western style participation (e.g. voting in municipal elections), and although many of the regimes in this region regard themselves as democratic, the narrow Western definition of democracy fails to acknowledge the broader participatory characteristics of the *khaliji*¹⁹ systems.

Several indigenous and traditional forms of social organisation and political dialogue endure in the Gulf region. For instance, familial networks – or relationships characterised by *qarabah* (closeness), command loyalty based on genealogical connections (both patrilineally, matrilineally and through marriage). These family connections, particularly at the highest levels (specifically, the ruling family) govern a great deal of state activity. Functioning alongside the ideology of familism is that of the traditional *majlis*. The open door policy associated with these periodic gatherings that take place in the semi-public space of the *diwan* or *majlis*, afford opportunities for members of the public to personally petition the ruler or sheikh regarding particular grievances and to supplicate help. This form of copresent communication (see Chapter 5) is disappearing now that the nation has been networked electronically. Like its neighbours Dubai and Saudi Arabia, Qatar is beginning to move towards “e-government” whereby formal requests and appeals must be submitted electronically, thereby reducing the need for a face-to-face

¹⁹ *Khaliji* is an Arabic term used to identify the Arabian Gulf and its residents.

encounters with *wasta*-bearing²⁰ notables (Dresch 2005: 15). Regardless of form, however, these regional consultative traditions provide important mechanisms through which Qataris can make their voices heard by the leadership.

Weber's (1958) three types of legitimacy provide a useful model for understanding the processes by which the authority of the state is maintained in Qatar. He identifies these forms of legitimacy as: traditional, charismatic, and legal or rational. The first two prevail in Qatar, though recent liberalisation efforts are slowly introducing bureaucratic structures and new legalities. The ruling family's authority is rooted primarily in "traditional authority", a system of governance whereby power is inherited and corresponds to longstanding historical ties. Traditional authority is based on the sanctity of traditions and customs that legitimise those exercising authority. This patrimonial system tends to perpetuate the status quo and is not conducive to social change. In addition, "charismatic authority" is very much in effect in Qatar. Charismatic authority rests on the exemplary character of the individual in power and belief in the order revealed by the leader. The magnetism of the Emir and the heir apparent HH Sheikh Tamim Bin Hamad Al-Thani is evident throughout the nation (e.g. umpteen images of the pair appear draped over buildings, in office reception areas, or plastered to the back windows of white Toyota Land Crusiers). The Emir is perceived to exercise benevolent discretion in the sphere which tradition leaves open to him. Strongly linked to her husband, similar sentiment is conveyed to HH Sheika Moza (see below). Within Qatar, at least in the spaces that I had access to, both the Emir and his consort's visions and mission were regarded as inspirational.

Although technically a hereditary and absolute monarchy, a number of consultative government entities exist which aid in administering the state. The Emir holds both executive and legislative powers and is assisted by the Council of Ministers and the Advisory Council. The Emir appoints the Prime Minister and a cabinet of ministers

²⁰ Wasta refers to an individual's capacity to exert clout, influence and power on account of one's personal connections.

who aid in the administration of the state and report directly to him. The partially elected Advisory Council is drawn from a pool of representatives selected from a limited electoral process and is intended to represent the Qatari populace (US Library of Congress 1994).

Under Sheikh Hamad's rule, Qatar has become more democratic. In an unprecedented move, an Emiri decree issued in 1998 announced plans for an elected municipal council. Recognising the importance of these elections, the Emir pointed out that "municipal elections are the first step towards...the goal of a full-scale democracy" (Rathmell and Schulze 2000: 54). For the first time, females were entitled both to vote and to stand as candidates.

A permanent constitution was signed in 2003. While the Emir still yields considerable power, the country is gradually moving towards a partially-elected parliament with legislative powers (Rathmell and Schulze 2000). Universal voting rights for citizens over the age of 18 and guarantees protecting the freedom of expression, press and religion, and the right to convene and establish organisations are now in place. The Ministry of Information has been dismantled and censorship officially abolished. The state-financed, uncensored Al Jazeera television station that began in 1996 represents the nation's commitment to freedom of information.²¹ Amid all of this, Qatar makes various ostensible attempts towards maintaining the appearance of its traditional and conservative Wahhabi Arab identity. Nevertheless, a number of Arab nations have censured Qatar's democratisation efforts and close connections to the US.

While I suspect that most Qataris appreciate the tangible benefits of improved public services, the pace and scale of some of the reforms being implemented may well alienate certain facets of the Qatari population. The extent to which top-down decisions of a small circle of Westernised, liberal-minded elite apply to the broader

²¹ According to the Economist Intelligence Unit, Al Jazeera broadcasts have been a source of irritation to a number of Arab governments (2004).

population is difficult to ascertain. While I came to know a narrow stratum of students who were the direct beneficiaries of these neoliberal reforms, a colleague of mine stationed outside of Education City assures me that many people had complained to him directly regarding the direction that the state was being taken, the vast sums of money that were being spent and their helplessness to do anything about it (Gardner 2011, pers. comm.).

My colleague's insights were corroborated when I returned to live in Qatar during the Arab Spring which saw a number of leaders toppled in early 2011. During a yoga session, a downstairs neighbour told me about a vitriolic Facebook page she had accessed through a proxy server in Polish that was campaigning for the removal of the Qatari Emir. I tried unsuccessfully to access the page "Freedom Revolution March 16 Qatar" through my personal Facebook account (making claims of the abolition of censorship difficult to verify), but found a short Reuters article which reported that at the time of publication the site had accrued 1, 649 "likes" signifying people's approval of the content. Whether these individuals are located inside or outside the country, however, is impossible to determine given the global network of Facebook users. According to Reuters, the list of demands also included the exclusion of the Emir's influential consort, Sheikha Moza from politics and the removal of an American military base from Qatari soil (Doherty 2011).²² Until now, serious internal political dissension in GCC countries has been curbed through a combination of benevolent welfare, wealth redistribution strategies and limited political freedom. It is perhaps no coincidence that this Facebook page was posted within days of the Saudi king's announcement of new benefits in pay rises, job creation and loan forgiveness schemes. It also followed the Omani Sultan Qaboos bin Said's pre-emptive moves to increase employment opportunities for his citizens. Might the Facebook campaign be interpreted as a means of inducing additional social benefits? Regardless, its content underscores a number of contentious issues deemed

²² Qatar's stance on foreign policy had remained relatively neutral before the Iraqi invasion of Kuwait and the Gulf War (Cordesman 1997). In 1992, Qatar ratified a bilateral defense cooperation agreement with the US. The alliance authorises American access to Qatari military bases (US Library of Congress 1994). Qatar also participates in the GCC defense initiatives.

to be problematic by traditionalists, such as female involvement in politics and the nation's close links with America and Israel.

At a time when the rulers have largely unquestioned political legitimacy, it is inevitable that some groups assume a relatively marginal position vis-à-vis the state. These groups do, however, exert some agency in their decision-making. For instance, some traditional families are reluctant to send their daughters to the national university (much less a coeducational institution) on the basis that some men do not want educated wives. Similarly, some Qatar University informants pointed to a number of spaces within the city (e.g. the rugby club, the golf club, the Pearl – a commercial and residential development) that they avoid on the basis that these venues serve no purpose for Qataris and have little relevance to their lives (Gardner 2011, pers. comm.).

Economy

Owing to its current status as the largest exporter of liquid natural gas, Qatar boasts one of the world's highest per-capita incomes. This, coupled with the consistently strong performance of oil and gas prices over the past decade has resulted in handsome profits for the small Gulf nation. The nation's economy has grown exponentially over recent years (Appendix F). Data published in the CIA World Factbook indicates that Qatar's 2010 GDP per capita was US\$ 145 300, making it the richest nation in the world (CIA 2011).²³

Qatar's confirmed gas reserves rank third largest in the world (Economist Intelligence Unit 2004: 18). Oil and gas revenues comprise 55 percent of the GDP, contribute 70 percent of government revenue and account for 85 percent of all export earnings (CIA 2004). The current leadership spends vast sums of the nation's petroleum wealth on the suspiciously vague premise of building a knowledge-based

²³ Liechtenstein was ranked second. For the same year the IMF's World Economic Outlook Database-October 2010 ranks Qatar as the country with highest GDP per capita citing a figure of US\$ 88, 232 and places Luxembourg in second position.

society and economy (e.g. the construction of Education City; new schooling system). Qatar is also beginning to invest heavily in research and development as a means of promoting future economic development.

A number of other changes have occurred in the business sector since the current Emir took control. Qatar has a large sovereign wealth fund and now has its own stock market where private wealth is traded. Free zones have been established where foreign companies can conduct business in Qatar without a local sponsor and operate according to common law principles. English is beginning to be used more for business communications, and a number of industries have become deregulated, opening up the market to competition (Rathmell and Schulze 2000). These changes and massive investments in public infrastructure, geared to improve education, health care, commercial ventures and aimed at providing a diversified future, are important means of legitimising the role of the governing elite and the function of the the state around a developmental model that draws heavily upon a consumerist ethic.

Population (Appendices I, J)

Contrary to most images, the indigenous population is both complex and heterogenous (Nagy 2006). Gardner, a Qatar University-based anthropologist, attributes portrayals of homogenous Gulf populations to a prolific "...ongoing and auto-Orientalist tenor of heritage-focused cultural projects" (2009: 7-8). The visibility of the elite tends to obscure the reality that a sizeable middle class and lower class exists in Qatar. The Qatari citizenry comprises: the Bedouin tribes who claim parts of the peninsula as their tribal territory (*dirah*) as well as naturalised Bedouins originating from tribes beyond Qatar; old urban merchant families (*hadhari*); Qataris of Persian descent known as the Ajam; the progeny of individuals who served the elite as servants and slaves; the Yemeni and Baluchi inhabitants, a percentage of whom are naturalised who generally occupy posts in the police force and national guard; and longstanding elite families (Gardner 2009).

Thus, the Qatari nation cannot be conceived of as a homogenous unit with a singular set of ambitions, but rather is a fragmented collection of groups possessing conflicting interests, opinions and exerting varying degrees of power and agency.

Citizenship is primarily determined patrilineally.²⁴ Non-Qatari females who marry Qatari nationals are bestowed citizenship for the duration of their marriage. Foreign residents are rarely conferred citizenship. The narrow definition of citizenship is closely bound up with tribal identity, but also reflects governmental obligations to nationals regarding the division and distribution of the country's wealth (US Library of Congress 1994). Residence patterns are patrilocal where families have traditionally been surrounded by extended kin, though nuclear families are becoming more commonplace. Marriages can be monogamous or polygamous. Each family belongs to a clan comprising part of a larger tribe. People tend to marry within their tribe.

With the exception of a few new real estate developments (e.g.. the Pearl Island, Lusail City, West Bay Lagoon, and Msheireb Properties), non-Qataris are not permitted to own land. Qataris tend to own a fifty-one percent stake in companies operating in Qatar. All residents of Qatar regardless of nationality benefit from free education, health care, cheap utilities, free local telephone calls, no income tax or municipal taxes.

Male citizens employed in the public sector are entitled to family allowances based on the number of children they have. Allowances are also available to widows, divorcees, orphans and individuals with special needs. Free land and interest-free loans are granted to Qataris for residential construction. Governmental housing exists for nationals of limited means (Nafi 1983).

The majority of Qataris are employed in managerial positions in the public sector (Winckler 2000; Appendix K). Government employment functions as a distribution

²⁴ The broadening definition of Qatari citizenship is discussed in Chapter 4.

means for Qatari wealth. In 2003, 86.5 percent of the indigenous workforce worked in governmental positions (Peninsula 2003). Manual jobs tend to be occupied by Arabs from poorer regions and Asians.

With an indigenous population of ranging between approximately 250 000 to 350 000, Qatari nationals barely represent a quarter (if even) of the resident population.²⁵ The small pool of working-age citizens has forced the nation to rely extensively on foreign expertise and manual labourers to sustain many of its enterprises (Appendix L). In Qatar guest workers, foreign expatriates who hold temporary residence status, account for as much as 80-85 percent of the nation's 1.5 million inhabitants (Kapiszewski 2001: 39-40).²⁶ Approximately half of these workers are from Bangladesh, Sri Lanka, Pakistan, India, Nepal and the Philippines. Arab nationalities represent about 20 percent of the workforce, and the remaining quarter are from English-speaking countries in the West, primarily Canada, America and the UK (US Department of State 2003). The small ratio of Qatari citizens in relation to expatriate workers inverts the majority-minority scenarios that most Westerners are familiar with.

Protective measures and zoning strategies

In Qatar, the population distribution is primarily concentrated in and around Doha, with smaller numbers congregating around Mesaieed, Al-Khor, Dukhan and Ruwais. Regardless of location, however, because of population dynamics, rigid distinctions are made between indigenous *mutawatin* (citizen or national) and foreign *wafid* (expatriate or migrant). Dresch points out that while this "arbitrary self-classification" is not unique to the Gulf region, the occurrence of this social phenomenon manifests itself differently throughout the globe. He explains:

²⁵ Accurate and consistent data pertaining to Khaleeji demographics throughout the region are hard to come by. The Qatar Statistics Authority only provides information about the total population residing in Qatar rather than providing a breakdown of nationals to foreign workers.

²⁶ There is a dearth of statistics compiled by the Qatari government.

The usual pattern with European states...has been to draw a line coincident with physical boundaries, placing foreigners notionally 'outside' the polity: the corresponding problem in public rhetoric is of immigrants and border controls. [Whereas] the Gulf states, with large non-citizen populations inside their frontiers, must draw the line by other means, which I suspect prefigure what we all face as part of globalization or *al- 'awlamah*. The rule with modern states seems to be that the greater the degree of economic and political interconnectedness, the greater the stress on exclusivity, expressed often in essentialized terms of 'culture'" (2006: 200).

Inundated as they are with expatriate workers, the fact is that Gulf nationals do not represent a critical mass in their own homeland. Threatened by this foreign majority, claims of a definitive and bounded Qatari identity are fairly commonplace within the indigenous community. As a long-standing structural feature, this foreign presence warrants some attention (Dresch 2006: 201). Qatar's insourcing strategy – whereby labour and expertise are brought into the country – is the reverse image of manufacturers in developed nations outsourcing work to capitalise on cheap labour located elsewhere (Dresch 2006: 201). As the state of Qatar attempts to reconfigure itself as a knowledge-based economy, its diminutive citizen population depends heavily on the presence of foreigners to develop their nation. This restructuring scenario results in a demographic imbalance, a precarious situation that many Qataris cite as justification of their privileged status affording them exclusive rights. Thus, the state apparatus has implemented a number of privileging strategies and codified structural arrangements including a "Qatarization" policy (discussed below) and a system of *kafala*, or sponsorship pursuant to protecting the hegemony of the native population. The latter establishes each citizen as a potential *kafeel* (sponsor) for individuals or corporate entities intent on establishing businesses in Qatar. The *kafeel* assumes the role of employer or business owner and mediates relations with the state on behalf of the sponsored individual/company. The contracts, laws and bureaucracy associated with sponsorship construct asymmetrical relationships whereby power is conferred to the sponsor. Hence, the presence of foreigners simultaneously enables the state apparatus to realise its ambitions of modernisation,

as well as providing tangible opportunities for citizens to generate income and exert some control at the local level.

In addition, the government has implemented a number of zoning or containment strategies in order to safeguard its indigenous population from the influx of outsiders and their liberal influences. This structural arrangement also suits many of the foreign professionals who actively seek housing in gated communities where they have more freedom (e.g. can consume alcohol and wear bikinis by the pool without censure from the authorities). Many Western expats in Qatar expressed their reluctance to move to “dry” countries like Kuwait, regardless of how much money they were offered, so liberal spaces such as walled compounds and the licensed rugby club are an important means of attracting/retaining foreign expertise.

While Qataris recognise the immediate need for expatriate workers to support new infrastructure, media outlets frequently bemoan the moral risks associated with the influence of outsiders. Every so often, the local press publicly denounces foreign guest workers en masse for perceived declining standards of morality, branding their presence as a pervasive threat to Qatari culture. During a recent visit, a number of expatriates informed me that they were experiencing a “crackdown” as a result of a high ranking official’s unsubstantiated allegation that foreigners were responsible for a decline in societal values. A concern among some clerics and conservative members of society is that extensive “openness” is detrimental to social order. In general, foreigners and their “liberal” attitudes are synonymous with immorality. Thus the Qatari government, keen to be seen as protecting its citizenry occasionally intervenes in activities such as banning specific websites, police road checks, blocking television channels, confiscating objects (vibrators, alcohol), censorship, and in one instance, outlawing “Pokemon” collectors cards for children (now permitted) (Dresch 2006: 206). Protective measures – both political and geographical – serve to establish social distance between citizens and foreign nationals so as to conserve “status, control and moral order” (Dresch 2006: 216). Thus, this process of enclaving ensures that locals are buffered from the threat of

liberal taint whilst providing spaces deemed appealing for Western experts recruited to realise neoliberal goals (e.g. raising the quality of Qatari citizens via educational opportunities). These containment strategies remove the perceived threat of the large male population of transnational labourers.

While a large foreign presence is necessary to achieve national projects driven by neoliberal logic, the state's ability to maintain the hegemony of citizen over non-citizen is crucial in a scenario where the native population is so heavily outnumbered and local identity and values are perceived to be at risk. Dresch explains:

The ability of Gulf elites to interact as they do with global pressures depends not only on control of localized resources...but on speaking for nation states whose people they represent and whose territory they control. They have, so to speak, constituencies... Adaptation to global economic constraints requires governmental action – whether on quotas, exclusions, or access to forms of training – if citizens are not to be marginalized by foreign capital and the polity in effect dissolved (2006: 202).

When it comes to the importation of experts, there exists a fine balance between capacity building and potential dependency. To allay dependency fears, the state has embarked on a capacity building process known as “Qatarization”, whereby the government aims to reduce its reliance on the expertise of foreign workers by replacing qualified Qatari nationals in key positions in designated sectors. A 1997 Emiri degree requires that Qataris represent 20 percent of the private-sector workforce. The Strategic Qatarization Plan of 2000 is even more ambitious, aiming for half of the energy industry to be Qatari nationals. These policy implementations represent rigorous campaigns designed to increase the visibility and involvement of the minority citizen. Cornell University's medical programme is an intrinsic part of the Qatarization initiative, geared specifically to train Qatari physicians in order that they might participate more fully in the provision of the nation's health care system. The nation's investment in the training of Qatari medical practitioners reflects the imperative to place supervisory control of medical practice in Qatari hands,

especially at HMC where non-Qatari professionals greatly outnumber Qatari nationals.

In addition to indigenising and safeguarding the local workforce, the benefits of Qatarization are three-fold: it fosters domestic workforce initiatives, retains wealth and invests in the national economy (Pollock 2007). In addition, Labor Law No. 3 of 1962 stipulates that nationals must have first right of refusal for any vacant positions, followed by non-Qatari Arabs. The preference for Arabs is an attempt to “Arabize” the employment sector, reflecting long-standing concerns that Arab and Islamic character are at risk as well as obviating communication barriers with non-Arabic speakers (Winckler 2000). These policies place a premium on the limited number of Qataris who attain advanced degrees.

Women

Qatari women are permitted to drive and work outside of the home, and obtaining a university degree is strongly advocated by the government. Qatari women who until recently were primarily employed in gender-segregated sectors such as education, health care and clerkship roles, are beginning to participate in a broader array of positions. This may be attributed in part to Sheikha Moza who has emphasised females’ social obligations and the importance of their participation in the growing economy. One Qatari medical student contends that HH is not only an inspiration, but also that “since she came to power, Qatar has changed 100 percent” (Weill Cornell Medical 2008: 31). HH is involved in a vast array of projects related to education, aid, culture, architecture, women’s issues and diplomacy and is broadly regarded as a force of change in Qatar.

It is no coincidence that HH was photographed and televised for the first time alongside her Sandhurst-educated husband at the opening of the new WCMC-Q building in October 2003. Before this event, Qataris did not know what the second of the Emir’s three wives looked like (nor do would they be able to identify the other

two as HH is the only one with a public profile). This calculated decision enabled the Qatari leadership to broadcast a progressive image to its audience and to position itself as a new educational and diplomatic player on the world stage. Since then, HH has become brand in her own right. Regularly pictured on educational and diplomatic missions abroad, immaculately dressed in haute couture with her signature trademark turban, HH has recently featured in *Vanity Fair*'s best-dressed list. She is reconfiguring her role as a figurehead of the Qatari state by fashioning a new womanhood for Qataris, one that is both consumerist and worldly. As a Qatari maven of aesthetics, the Emir's consort plays an important role in how Qatar indexes itself as a modern nation (Gardner 2011, pers. comm.). To be sure, the unique position that Sheikha Moza has created for herself breaks with a number of conservative Qatari traditions, though few are willing to converse openly about any grievances against the leadership and the trajectory it has single-handedly chosen for the nation.

The changing face of education

The Qatari government is now attempting to broaden its range of commercial endeavours. Education comprises a key component of this diversification strategy, entailing heavy investment in skills-training programmes and tertiary education provision to better prepare nationals for employment in the new private sector industries. Before the educational overhaul that commenced in 2002, a census of the national workforce in the public sector revealed that half of the employees had completed primary or secondary education. The remainder had graduated from the national university with degrees in the humanities or religious studies (Fasano and Goyal 2004: 8). This earlier scenario greatly contrasts with the large number of students now electing to study technical and business studies at the tertiary level.

A formal education system did not exist in Qatar before the discovery of oil. There were, however, informal classes held at mosques where some children learned to read and write passages from the Quran (in some cases females were privately

tutored by Islamic scholars within the home). It was not until 1948 that the first formal boys' schools were opened offering a curriculum of Islamic studies, Islamic history, maths, geography, English and Arabic (Al-Kobaisi 1979: 34). The first girls' public school was established in 1956. Sheikh Al Mani, an influential Qatari scholar, was a strong proponent of girls' education at this time, advocating that education of both sexes was consistent with Islamic principles (Al-Misnad 1985: 36). An Egyptian curricular model was adopted, gradually being supplemented by curricula and texts from around the Arab region. Though Qatar commenced production of local texts in 1965, writers continued to borrow heavily from pedagogical resources derived from other Arab countries (Al Kobaisi 1979).

Publicly funded education is available free of charge to all nationals and children of expatriates who hold government posts. In recent years, the education system has improved, as shown by performance indicators. For instance, literacy rates for individuals ages 15 and above have steadily improved over the past two decades, rising from 76 percent in 1986 to 93 percent in 2007 (World Bank 2011a).

Today there is a greater range of options for schooling in Qatar. Alongside the publicly funded governmental Arabic schools, there are three main alternatives. The first are embassy-sponsored "community schools" which cater to the needs of expatriate children (i.e. British, Americans, Indians and Pakistanis). The second are "international schools" which are not affiliated with specific embassies.

International schools follow a foreign curriculum and are available to both Qataris and expatriates. The third are "private Arabic" schools. Both private and public Arabic-medium schools follow the Qatari curriculum and attract large numbers of Arab and Qatari students.

In 2001, the Qatari leadership commissioned the RAND Corporation to assess the country's elementary and secondary education system (K-12) and to submit recommendations for the design and implementation of a new standard of education system designed to address the changing demands of Qatar. The RAND report

revealed that the Qatari education system was “rigid, outmoded, and resistant to reform” and underscored the need for stronger performing primary and secondary education systems in order to support the nation’s new economic and social developments (Brewer et al. 2007: xvii).

Alongside the Ministry schools, RAND introduced an Independent School Model based on a curriculum structured by standards, assessments, professional development and the use of data as performance indicators. This standards-based system enveloped the principles of autonomy, accountability, variety and parental choice. These reforms have resulted in the use of internationally benchmarked standards, the creation of learner-centred classrooms, facility upgrades, and a more comprehensive system of teacher training. In addition, RAND altered the power and authority structures of the education system through their implementation of the Supreme Education Council, the Education Institute and the Evaluation Institute, each designed to support specific aspects of the Independent School Model. Parents can elect to send their children to the more traditional Ministry schools or the new Independent schools. Societal change is inextricably connected to education and thus these new opportunities constitute a main ingredient of Qatar’s nation-building recipe.

CHAPTER TWO

Gotta Go Global

“I believe we offer the world a model of cooperation and an example of healthy globalisation.”

- HH Sheikha Moza (QF 2007)

Anthropologists have long been occupied with the distinctions and articulations between the “local” and the “global” and how “universal” and “particular” phenomena are manifest in the face of globalisation. This chapter will explore the term “globalisation” and will provide an overview of how it is affecting tertiary education. Second, I will demonstrate how Education City fits into the larger processes of globalisation. Third and finally, I introduce the Medical Program as a global form and WCMC-Q as an example of a “global assemblage” and show how it contributes to an understanding of “anthropological problems”.

Globalisation and education

Globalisation has fundamentally altered the conditions surrounding the delivery of education, effectively homogenising pedagogical strategies and streamlining educational policy and reform. While educational exchange has been going on for centuries (i.e. via the movement of faculty and students, the borrowing of curricular documents), this current wave of globalisation is different as it incorporates new roles, markets, agents, tools, rationales and policies (Donn and Al Manthri 2010: 27). Within the context of higher education, the term “denationalisation” is used to describe “the process whereby developmental logics, frames, and practices, are increasingly associated with what is happening at a larger (beyond the nation) scale” (Olds 2010). With the advent of denationalisation, educational policy makers are responding to new challenges, which include new demographics, unprecedented

numbers of secondary school graduates, meeting the demands of growing knowledge economies (Knight 2006), as well as comprehending and assimilating non-Western education into Western pedagogy and recognising the implications of emergent international curricula and academic institutions (Resnik 2008). Amidst these transformations, governments throughout the world are being forced to evaluate how well indigenous systems of education are preparing their citizenry for the changing demands of a globalised world. The World Bank puts it succinctly:

Since education is the main source of knowledge creation, the task is clear: the education systems must be changed to deliver the new skills and expertise necessary to excel in a more competitive environment (World Bank 2007a: 84).

Such assessments are leading to reforms devised specifically to address the inadequacies of extant educational systems. Keen to advance the domestic provision of education, there is an increasing trend in the Arab Gulf States to import exogenous policies and educational programmes in an effort to rectify identified shortcomings.

I take as a starting point that the now ubiquitous term “globalisation” broadly refers to “the intensification of global interconnectedness” (Inda and Rosaldo 2002: 2), and refers to the process through which local, regional and national flows of commodities, services, people, capital, ideologies and technologies become increasingly integrated on a global platform resulting in hitherto distant people and cultures becoming more contiguous. Giddens expands:

...the intensification of world wide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa. This is a dialectical process because local happenings may move in an obverse direction from the very distanced relations that shape them. Local transformation is as much part of globalisation as the lateral extension of social connections across time and space (1990: 64).

Depending on one’s perspective, globalisation may connote notions of integration, homogenisation, interdependency, imperialism, Americanisation, Westernisation and/

or colonialism. In addition, other processes such as localisation, internationalisation and universalisation are closely linked to the forces of globalisation (Held et al. 1999). Despite its ubiquitous presence in scholarly writing, there is little consensus as to what the concept of globalisation entails or how it should be addressed, much less whether it is something that should be applauded or reviled. While a definitive definition and theoretical approach to this phenomenon have been points of contention amongst academics, in relation to education most would concede that the process of globalisation exhibits the features described below.

Advances in communication, transport and technology – which serve as global conduits for goods, services and ideas – have facilitated accelerated exchange of these commodities and are fundamentally altering the delivery of education. According to Harvey (1989), these technological developments effect a condition known as “time-space compression”. This refers to the experiential collapsing of spatial and temporal distance brought about by technological advances, the result being, “the annihilation of space by time: [and] in the reorganization of time in such a way as to overcome the barriers of space” (Inda and Rosaldo 2002: 6). This acceleration of time and diminishing of distance renders the transfer of goods, services and information both cheaper and near instantaneous, thus cultivating new global markets that operate across traditional borders. Hence, a recurrent feature of globalisation is its capacity to “deterritorialise”²⁷ objects, actors, culture, policies and processes (Inda and Rosaldo 2002).

The educational landscape has been transformed due to technical improvements with non-conventional academic institutions now being accessed via distance/virtual learning. As someone who can afford to take full advantage of the emerging scenario, HH points to the benefits of this changing educational terrain:

²⁷ Deleuze and Guattari (1972) first coined the term “deterritorialization” to describe the liberation of labour-power from specific modes of production. The concept has since been appropriated by anthropologists to refer to actors and objects that have the capacity to transcend territorial boundaries resulting in the loosening of ties between culture and place.

The sharing of knowledge, ideas and values is the noblest way to transcend barriers. In this sense, globalization is the architect, which constructs academic bridges across cultural and geographical landscapes (QF 2007).

We are beginning to see the emergence of new educational providers and a greater mobility of educational programmes. As a result, Western models of education are being disseminated around the globe and are fast becoming the preferred educational commodity for developing nations. This globalisation of education means that a broader range of societies are engaging with these Western educational goods and in so doing, bringing different cultural perspectives and alternative forms of knowledge to the table.

As the corollary of time-space compression, Giddens notes that globalisation facilitates “distanciation”, an ordering of time and space that contributes to “an intensification of worldwide social relations that link distant localities” (1990: 640). Supported through advances in ICT, remote communication has the effect of expanding the realm of social life beyond local boundaries, thus “fostering relations between ‘absent’ others, locationally distant from any given situation of face-to-face interaction” (Giddens 1990: 18). This disembedding process enables social relations to be lifted out or freed of local spheres of interaction and reconstituted across expansive spans of space and time (Giddens 1990: 18). A consequence of this lifting out is that once well-defined physical settings of social intercourse come to resemble assemblages of locations. Thus, localities are simultaneously affected “...by that which is absent...[and] are constituted not just by what is immediately present but also by influences quite removed from them” (Inda and Rosaldo 2002: 8). This certainly rings true for students involved in transnational educational models.

Role of intermediaries in transnational education

That constellations of power and expertise are now located in networks that transcend national borders is also important. The influence of absent authoritative

intermediaries is evident in the growth of, and increased participation in, meta-national entities such as: the Arab League, the GCC, the IMF, the World Bank, UNESCO, and the WTO. Involvement with such transnational organisations only serves to amplify the degree of integration between nation states and global agencies. Though these organisations do not exert formal jurisdictional authority over regulations and practices within the nation states, such regional and supranational interconnectedness means that national agendas – particularly within the field of education – are effectively influenced by the hegemony of global governance entities (Held and McGrew 2002; Donn and Al Manthri 2010). Thus, transnational norms and expectations play a decisive role in reshaping local practices.

The former UNESCO Chief of the Higher Education Section underscores how the encroachment of one such global organisation along with its mechanism for globalisation may lead to the debasement of higher education in the Gulf region. In his capacity as consultant and representative of UNESCO to the Gulf Arab States, Dr. Abdalla Bibtana stated that:

One of the main instruments of globalization and the emergence of the neo-liberal global economy is the creation of the World Trade Organization (WTO) and the launching of the General Agreement on Trade and Tariffs (GATT)... The initial responsibility of WTO was to administer the GATT agreement which dealt mainly with trade, commerce and finance – in other words, with money, commodities and products. The services sector – such as education, higher education, tourism, health etc. – was not included in the provisions of GATT (2007: 3).

Yet, with time the WTO extended its remit to include the services sector, through its launch of the General Agreement on Trade in Services (GATS). Since its introduction, GATS has functioned as an instrument that bolsters a burgeoning global market through the legitimisation and legalisation of tariff eliminations in the spheres of higher education, health care and tourism. Classified as a service under GATS, the tertiary education sector will be governed by trade rules and subject to new forms of liberalisation and regulation. Most importantly however, is that the reduction of

trade barriers is opening up new avenues for international trade in the educational sector.²⁸ Although it is still in the preliminary stages, the classification of higher education as a tradable “service” and its inclusion under GATS will have important policy, legislative, regulatory, fiscal, educational and socio-cultural implications for the Gulf region.²⁹ As it stands, there is already a growing trend in the Gulf region towards the privatisation of education. This scenario is beginning to create an amalgamation of educational systems as Gulf nations utilise educational packages developed elsewhere.

The influence of these global authorities’ mandates on the development of national education is pronounced and can be detected in the adoption of externally defined parameters surrounding the ideology, language and rhetoric employed in official policy documents such as the inclusion of buzzwords like “knowledge economy”, “outcome-based learning”, “lifelong learning”, “human capacity building”, “quality assurance” and “international benchmarking” used to rationalise developments in tertiary education. For instance, a World Bank report emphasises the manner in which improvements in tertiary education provision can accelerate development objectives, contributing as it does, “...to building up a country’s capacity for participation in an increasingly knowledge-based world economy” (2007b: 3). A similar framing of goals is observed at the national level, as demonstrated by excerpts of QF’s policy statement:

Qatar Foundation is leading Qatar’s drive to become an advanced knowledge-based society. It is transforming Qatari society by educating the rising generation to the highest world standards...It is turning Qatar into a producer of knowledge...to accelerate the human development process...(QF 2007).

²⁸ Under GATS, governments select which services will be included in their respective negotiation schedules. To date, only Bahrain has pledged a formal commitment to include higher education in its schedule.

²⁹ See Bibtana (2007) for a more thorough discussion of the speculated impact of GATS on higher education in the Gulf.

Further, Cornell's University President Skorton reiterates global rhetoric at an institutional level, stating that Cornell, "has a long history of international research and capacity building", that "universities are among our country's best tools to build human and societal capacity" and that higher education can "create a pathway for millions to...enter an increasingly globalized society" (Skorton 2010). The preparation of students for participation in the knowledge economy points to a direct link between imported higher education and the demands of domestic labour markets.

Based on their affluence, the Arab Gulf States are not normally categorised as developing nations, however, it can be argued that their educational systems are still at an emergent stage. As the global education sector expands, developing nations are beginning to rely on educational imports from developed countries. Rich as they are, the Gulf nations are in a position to purchase educational programmes from abroad. As a result:

...new organisational forms in higher education – 'accreditation', 'quality assurance', qualifications frameworks – transform the regional-local education systems of the Gulf and replace them with structures, systems and processes which are located elsewhere (Donn and Al Manthri 2010: 24).

The Arab Gulf states are putting out lucrative tenders that enable them to recruit high profile Western institutions as a means of aligning themselves with international targets and becoming more competitive on the global stage. Yang contends that the globalisation of tertiary education is primarily profit-driven and geared to address market requirements (2003: 281). The colonial undertones of her argument stress her concerns about the precariousness of educational transactions that result in the educational donors' worldviews being projected onto recipient nations. In a similar vein, Usher and Edwards caution that "under conditions of global competition" national educational priorities may become subordinate to and the needs of the labour market (1994: 175).

The market philosophy of neoliberalism is a salient feature of education in the developed world. Nowadays, many Western universities (both public and private) are run like businesses, complete with administrators charged with managing and delivering prescribed outcomes (Gewirtz 2002). These shifts, coupled with funding cuts to the education sector, have forced Western academic institutions not only to vie for students domestically, but also to explore new consumer markets where their pedagogical wares might be flogged, resulting in the commodification and massification of tertiary education (Morey 2004; van der Wende 2003; Poovey 2001; Neave and Van Vught 1991). Treating education (1) as a commodity, and (2) as job-training rather than mind-broadening, is generally considered a neoliberal perspective, and one fostered by the imperatives of global capitalism. It is now therefore possible to speak of the “business of education”.³⁰ Correspondingly, there has been significant uptake in the use of transactional language in connection with higher education, including terms such as: clients, commercialisation, franchising, commodification, MacDonaldisation, consumers and marketisation (Bubtana 2007: 4). Thus, the entrepreneurial conditions of a global marketplace are fostering competition between HEIs, which, some would argue is producing an emergent form of “academic capitalism”³¹ as universities strive to respond and adapt to and profit from the demands of new knowledge markets (Kogan 2005; Slaughter and Leslie 1997). While some scholars (Donn and Al Manthri 2010; Bubtana 2007) suggest that such consumption of foreign educational packages will stifle domestic knowledge production thereby reducing a nation’s capacity to compete in the future, Margison and Rhoades (2002) argue that actors are capable of exerting “local agency”. Margison and Rhoades provide a useful synopsis of the prevailing homogenisation discourse surrounding globalisation and higher education, observing that as universities extend their influence internationally:

³⁰ Term borrowed from Donn and Al Manthri (2010).

³¹ This phenomenon is not to be confused with Bourdieu’s term “academic capital”. Instead, the term academic capitalism refers to “institutional and professional market or market-like efforts to secure external moneys” (Slaughter and Leslie 1997: 8).

Educational contours of countries (and of regions and continents) are being reshaped by regional trading blocs that lead higher education to become more similar across national boundaries and more active in regional markets (2002: 282).

But they also point out what is missing:

At the same time as these global forces press upon higher education, the legitimacy of nation states and of national higher education systems that express national cultures are being challenged by movements to preserve and promote local cultural identity and independence. The prevailing model and concepts neither capture nor explain these dimensions of higher education (Marginson and Rhoades 2002: 282).

Whether a reliance on foreign providers for immediate capacity building is shortsighted or not remains to be seen. What may begin to be charted at this stage, though, along the lines suggested by Marginson and Rhoades (2002: 304), is evidence of the “reciprocity of influence” between the donor institution and the recipient nation. In Chapter 3, I propose a shift from the more mechanical model-metaphor implicit in the notion of how “knowledge transfer” and associated “packages” (e.g. scientific, knowledge) function (a model that goes for instance, with earlier modernisation theory and ideas about technology transfer), to a more organic model-metaphor of transplants (the modification and adaptation between recipient and transplant analogous to recent processes of “glocalisation” or “hybridisation”) in an effort to address the “reciprocity”, synergy, local dimensions and agencies exerted in the era of globalising education.

Changing objectives of higher education

Just as universities are prone to marketisation strategies, so too are broader educational policies. We are beginning to see the increasing alignment of educational supply and employment demand with overhauls framed by neoliberal rhetoric propounding the merits of job creation, increasing standards, competitiveness and human capacity. Governments are starting to incorporate

market policies into domestic educational agendas in a bid to remain (or in the case of Qatar, *become*) competitive in an increasing connected world (Whitty et al. 1998). Altbach provides a brief synopsis of the changing face of education:

A revolution is taking place in education. Education is increasingly becoming an internationally traded commodity. No longer is it seen primarily as a set of skills, attitudes and values required for citizenship and effective participation in modern society. Rather, it is increasingly seen as a commodity to be purchased by a consumer in order to build a 'skill set' to be used in the market place or a product to be bought and sold by multinational corporations, academic institutions that have transmogrified themselves into businesses, and other providers (2002: 2).

That higher education is gradually becoming synonymous with occupational training is evidence of the role that the rapidly changing labour market is having on educational reform. In the case of Qatar, the introduction of new technologies and improved infrastructure, diversification into non-oil industries and the expansion of the service sector has fashioned a dramatically different employment structure (Donn and Al Manthri 2010: 93). Thus, against this backdrop, skills acquisition is now regarded as a necessary condition of economic development.

Resnik suggests that education be considered in light of its changing capacity in the face of globalisation whereby "...the goals of education systems have been redefined in relation to a world economy and to a social and political reality that transcends national frames" (Resnik 2008: 2). In Qatar, the rationales behind the state's educational reforms at the primary, secondary and tertiary levels are manifold but primarily reflect the need to cater to the new demands of the labour market. Changes also reflect a modernist agenda whereby the state is attempting to position itself on the global educational scene through investment in the welfare of its citizens and building human capacity (discussed in Chapter 4). These objectives are being realised through the recruitment of world-renowned universities and launching itself as a regional knowledge hub (also see Appendix H).

Table 5: Universities in Education City

Institution	Degree	Fields of Study	Programme established
Virginia Commonwealth University in Qatar	Undergraduate –Bachelors	Design	1998
Weill Cornell Medical College in Qatar	Undergraduate	Pre-medical	2002
	Graduate - Doctor of Medicine	Medicine	2004
Texas A&M University at Qatar	Undergraduate - Bachelors	Engineering (Chemical, Electrical, Mechanical, Petroleum)	2003
	Graduate – Masters of Engineering Master of Science		2008
Carnegie Mellon University in Qatar	Undergraduate –Bachelors	Computer Science Business Administration	2004
		Information Systems	2008
Georgetown University School of Foreign Service in Qatar	Undergraduate – Bachelor of Science	Foreign Service	2005
NorthWestern University in Qatar	Undergraduate – Bachelor of Science	Journalism Communication	2008
Qatar Faculty of Islamic Studies	Postgraduate Program – General Diploma	Islamic Studies	2007
	Masters	Contemporary Fiqh	2008
		Public Policy in Islam	
HEC Paris	Graduate	Executive Master of Business Administration	2010
University College of London	Postgraduate – Masters	Museum Studies, Conservation, and Arab and Islamic Archaeology	2011

The transformations in tertiary provision in Qatar are consonant with Robertson and Dale’s observations regarding the effects of globalisation on education in that there exists:

...an evident shift away from a predominantly national education system to a more fragmented, multi-scalar and multi-sectoral distribution of activity that now involves new players, new ways of thinking about knowledge production and distribution, and new challenges in terms of ensuring the distribution of opportunities for access and social mobility (2008: 20).

In a speech delivered at the official opening of WCMC-Q on October 12, 2003, Dr. Cohen, President of the AAMC remarks on the importance of these new transnational arrangements:

[Cornell's] broader significance lies in the groundbreaking example of global cooperation that our shrinking world so desperately needs at this especially troubling time in our independent history.

In light of the processes of globalisation, Robertson and Dale urge scholars to be cognisant of the ways in which education is assembled on a local, regional and global scale. With its recent inclusion of foreign educational providers, Qatar's composite education system demonstrates the multi-scalarity of pedagogical provision brought about by globalisation. Similarly, in terms of globalisation and the capitalisation of education, the fact that this new educational hub also attracts non-Qatari fee-paying students means that Qatar's HEIs produces surplus value and profit for the nation.

Education deterritorialised

Porous boundaries are rendering educational actors' worlds increasingly compressed and integrated. They are thus experiencing "a heightened entanglement of the 'global' and the 'local' such that while everyone might continue to live local lives, their phenomenal worlds have to some extent become global as distant events come to have an impact on local spaces" (Inda and Rosaldo 2002: 9). This is definitely true of WCMC-Q students who engage on a daily basis with a curriculum and are subject to modes of practice and standards of evaluation that are gauged according to North American norms. In other words, seemingly local medical school experiences acted out in Doha are governed by events, flows, standards, values and ideas generated in localities far removed from the students' immediate context.

Just as globalisation has resulted in the loosening of culture from place, globalising processes are facilitating the transplantation of education. The term "deterritorialization" is used to connote this "general weakening of ties between

culture [education] and place, to the dislodging of cultural subjects and objects from particular or fixed locations in space and time” (Inda and Rosaldo 2002: 11). Being neither fixed nor immobile, culture can no longer be thought of as belonging exclusively to a specific population situated within a bounded community, subject to the same forces; nor can education. Like cultural forms, educational programmes now freely traverse the globe and transcend national boundaries, “a process that brings cultures [pedagogical forms] formerly located in different parts of the world into the same physical terrains, thus turning numerous places into spaces of cultural juxtaposition and mixture” (Inda and Rosaldo 2002: 11). The cross-border institutional model used at Cornell serves as a good example of geographically dispersed people being brought into close contact with each other via knowledge exchange and the borrowing of pedagogical artefacts. Sourced and imprinted in America, the circulation of culturally-laden institutional forms and teaching tools such as curricular documents, cadavers, texts, knowledge and faculty, permit the Qatar-based students “to participate in the imagined realities of other cultures... eroding the ‘natural’ connection or isomorphism between culture and place” (Inda and Rosaldo 2002: 11). The deterritorialisation of the educational form results in the actor having to apprehend and mediate seemingly foreign concepts, ideas and practices as well as indigenous ones, under the gaze of his/her local community.

The question of agency and homogenisation

Several scholars contend that the dissemination of cultural forms results in the dilution and the homogenisation of culture. Applied to the field of medical education, this would suggest that the deterritorialisation of medical programmes might result in the convergence of medical knowledge and foster a uniformity of practice.

One extreme perspective is that homogenisation is tantamount to cultural imperialism. Often, the process of globalisation is equated with an asymmetrical exchange of products, knowledge and ideas produced in a metropole, which are then

imposed on a passive, less dominant periphery. This flow of goods tends to be depicted as unidirectional in nature, moving from the “Developed West” (centre/First World) to a “Developing other” (periphery/Third World), or in some instances, a good produced in the US and being transferred to the rest of the globe (Inda and Rosaldo 2002: 13). As mentioned above, the term globalisation carries with it connotations of Americanisation and Westernisation, the three at times being used interchangeably to emphasise the hegemonic influence of the occident.

Those who regard globalisation as a mode of cultural imperialism stress the convergence of culture whereby “the increased global movement of cultural goods [is understood] primarily as a process of cultural imposition and dominance – of the imposition and dominance of Western (predominantly American) culture over the remainder of the globe” (Inda and Rosaldo 2002: 13; Featherstone 1990). Under such conditions, Hannerz predicts that, “peripheral culture will step by step assimilate more and more of the imported meanings and forms, becoming gradually indistinguishable from the center” (1991: 122), resulting in dominant Western forms superseding original local variants at the expense of local traditions and values. The prevailing concern here is that peripheral cultures will ultimately become dependent on American or Western products to the extent that this will lead to the uncontested appropriation of “... Western versions of basic social-cultural reality: the West’s epistemological and scientific worldview, political culture and so on” (Tomlinson 1997: 144), thus compromising domestic knowledge production (Donn and Al Manthri 2010).

The potential social, cultural, ideological and economic ramifications arising from the use of non-indigenous products and services is an invidious matter, one “that evokes strong positions and sentiments” (Knight 2006: 56). This may explain the mixed response that Cornell’s arrival in Qatar initially precipitated. Medical education in particular has come under censure because practices and standards prevailing in advanced industrial nations are occasionally ill suited to the needs of

the recipient countries, and so may be suspect on the basis that transplanted programmes may not be culturally appropriate or relevant to the local context.

Much of the globalisation literature in other disciplines fosters images of a submissive and passive recipient population: one threatened by the preponderance of goods and influence from the West. It also presumes a largely malevolent agenda on the part of the West to cultivate a dependency on all things American. Further, these negative associations nurtured by imperialistic perspectives have the tendency to obscure positive outcomes associated with these flows and ignore the fact that nations like Qatar were already tapping into these Western conduits of expertise. For instance, citizens have long benefited from state financed schemes that have enabled individuals to access medical treatment and education beyond Qatar. Up until now, financing extended educational stints and medical vacations to the UK and the US has obviated the need to invest in domestic infrastructure and expertise.

Nor should it be overlooked that cosmopolitan Qatari elites actively invited WCMC into the country. In this case, the transfer of an American product was initiated through the agency, and for the benefit of, a so-called “peripheral” nation. Far from being an imposition or a form of cultural dominance, Cornell’s arrival was hailed by Qatar’s avant-garde leadership to be a valuable import and regarded as essential to upgrading and improving the provision of health care in Qatar.³² Should the application of a decontextualised American medical package be branded as deleterious on the basis that it may not immediately recognise local particularities? I would suggest that global dissemination of such benign educational programmes will ultimately reduce disparities in the quality of medical care and ultimately function as forces for progressive change, the proliferation of which will save lives and prevent illness.

³² Contrasting the cosmopolitan leaders’ endorsement of Westernisation, Cornell’s coeducational programme initially prompted disapproval from some of the more conservative Qataris. Eventually however, and undoubtedly owing to a number of PR campaigns, the institution became less of an enigma and students reported fewer incidents of negative press and derogatory comments being directed at the American college.

To equate globalisation with cultural imperialism is to depict recipients of cultural flows as abject, passive and devoid of agency. Peripheral agency is obscured in discourses that bemoan the Americanisation or homogenisation of cultural forms on the basis that foreign products are absorbed unconditionally. Recent ethnographic work, however, has done much to reverse the image of the negative consequences of globalisation on culture, instead demonstrating that when people in developing regions are confronted with an exogenous cultural form, “they do not simply or necessarily absorb its ideologies, values and life-style positions. Rather, they bring their own cultural dispositions to bear, interpreting and appropriating global ‘master-terms’ according to their own cultural codes” (Naftali 2008: 253; Inda and Rosaldo 2002: 16; Miller 1995). Appadurai refers to this transformation process of appropriated forms as one of “indigenization” (1990: 295). The recipient group’s agency is demonstrated through a range of registers when the largely middle to upper class Arab students initially encounter Cornell’s medical programme.

Just as Ang (1985) and Liebes and Katz (1990) document how foreign media forms are customised by informants imposing their cultural dispositions on them (Inda and Rosaldo 2002: 16), certain facets of Cornell’s academic programme were subject to interrogation, particularly with regard to how the course corresponded to Islamic doctrine. The programme was subjected to local interpretation, translation and appropriation in accordance with “local conditions of reception” (Inda and Rosaldo 2002: 16). As will be seen in later chapters, the implementation of a foreign medical training warranted some subtle accommodations to align it more with local expectations and accepted practices. The emergence of indigenised products, in which a “local” imprint is stamped on the imported form, recognises human agency and serves to challenge and blur conventional dichotomies such as “local” and “global”; “passive” and “active” (Naftali 2008: 253). An object’s reception is therefore not akin to imposition but rather a formative process in which the malleable cultural form is moulded to fit into the new setting. The cultural form thus becomes a synthesis of the worlds in which it is rooted.

Scholars employ a range of words to describe how people modify objects to suit their needs and preferences so indigenization (Appadurai 1996) becomes coterminous with customization (Inda and Rosaldo 2002), transculturation (Lull 2000), localisation, accommodation, or more generally with glocalization (Robertson 1992). All of these terms emphasise the transformation process that a foreign cultural object undergoes in an effort to render it more suitable for local consumption, in other words, the localisation of the global. The terms creolization (Hannerz 1992), hybridisation and heterogenisation are frequently found alongside the aforementioned terms and are used to denote the melange of cultural forms resulting from the mixing of the global and the local. Contrary to arguments of homogenisation and uniformity, glocalising processes are characterised by diversity. The American programme at WCMC-Q is gradually infused with some indigenous elements so as to fashion it to accommodate the realities of Arab modes of living. The transplanted product is imbued with a new diversity on account of its relocation to a new cultural milieu and altered ever so slightly (both at the institutional level and at the individual level) to make it more inclusive and to suit the needs and preferences of local recipients (e.g. students altering the way practices are carried out in the Arab clinical setting). The reception of a transnational form such as an American medical degree provides an illustrative example of these processes at play.

Yet, in the case of Cornell's medical programme, any adjustments tend to be minimal. In some ways, Cornell's transnational medical programme bears some striking resemblances to Ritzer's observations regarding McDonald's (2000). While McDonald's does make small changes to adapt to local conditions, in order to ensure global quality and consistency it is necessary for McDonald's to implement standardised operating features and baseline menus in each one of its franchises. While McDonald's capacity to adapt is important, altering its product too drastically would be detrimental to the quality and uniformity of their product and would undermine the McDonald's brand. The same is true of Cornell's degree. The college and its programme were recruited both for its Ivy-league branding and the reputation of its medical degree. It was also brought in with a view to improving local health

care provision. While certain facets of the programme do not conform to local patient expectations, too much local adaptation will not only dilute the Cornell brand, but also impede structural improvements to the Qatari medical system. Thus, a precarious balance has to be struck between the localising and globalising forces at play in Weill Cornell's medical training package. In both cases a scientific rationale is employed to support the view that the imported package represents ultimately efficient or effective structuring of the product. In the case of Cornell, there are also claims about the universality of its science and of the pedagogy that inculcates that science.

Anthropology scholars tend to be concerned with the indigenisation on the reception end rather than an object's capacity to modify the product at source. I would suggest that in the case of WCMC-Q we are not only dealing with a process of local adaptation, but also a dialectic between producer and user. In the educational package, metropolitan awareness of the varieties of reception leads to some minor modifications of the programme and its delivery (Video-streamed lectures, On-site faculty positions, establishment of the Foundation Program are examples discussed below). Some of these alterations are tailored by locality, but it is possible to see the beginnings of some changes in the home version too.

An interesting analytical parallel here is with Science and Technology Studies (STS). At first in looking at technology transfer, STS focused on local processes of adaptation and appropriation: the West determines the prototype and the south tinkers with it until it works in their own setting. More recently, however, STS have documented innovation on part of the non-engineers, suggesting that "users" are also "producers". They can, at least on occasion, trigger a modification of a technological product to meet the needs or preferences that the original designer had not recognised but that has come back to the attention of the producers whether through sales figures, market research, or simply overwhelming popular evidence. The best and most obvious example of this is the home computer and the software industry.

Cornell has certainly had to set up a form of “customer service” in order to ensure that its degree is successfully transplanted. Initially, Cornell was viewed locally as being hostile towards Qataris. When large numbers of Qatari students failed to gain admission from the Pre-medical Program into the Medical Program, the institution was regularly accused by non-participants of “hating Qataris” and became notorious for “not giving them [Qataris] a break.” In conversations with individuals who had dropped out of WCMC-Q, or students attending other Education City colleges, many conveyed the impression that Cornell is “difficult and not do-able” to the point where few were willing to apply. Cornell’s reputation suffered as a result, which was only rectified after the institution staged a huge publicity campaign and a number of community outreach initiatives. To its credit, the university was aware of these problems and tried a number of strategies to address the issues with varying degrees of success. Fortunately, WCMC-Q’s now active involvement in the local community, combined with the establishment of its Foundation Program and its introduction of summer programmes, has done much to demonstrate the institution’s desire to support Qataris in their educational endeavours and the number of applications from Qatari nationals has risen. I suspect the Ivy-league institution has learned much about remediation and cross-cultural education in the process.

Contravening Donn and Al Manthri’s (2010) concerns about importing a “baroque arsenal” of educational products, joint projects between Cornell’s NY and Doha campuses are beginning to generate new forms of knowledge. The branch campus opens up new scientific confluences through opportunities for teaching exchanges, overseas student placements (i.e. the potential for NY students to undertake clerkships and electives in Qatar) and research. Cornell’s involvement in Qatar has vast scope for collaborative medical/scientific research with unprecedented American access to new patient populations in a largely under-studied region. By focusing on genomics, microscopy, proteomics,³³ computational biology, biostatistics and indigenous flora and fauna, Cornell is taking advantage of its Middle Eastern

³³ Genomics is a branch of genetics that studies organisms in terms of their genomes (entire DNA sequences); proteomics is the study of the structure and function of proteins.

research base with a view to making scientific advances in these areas. For instance, scientific discoveries and the production of new knowledge in Qatar (e.g. locally-generated data pertaining to diabetes) has the potential to be filtered back to the source (via peer-reviewed journals) and contribute to scientific knowledge. Further, the money and donations that the NY campus has received from Qatar has helped to improve research facilities at home.

Anthropological problem spaces, global forms and assemblages

While the above perspectives present globalisation as tantamount to a new age or as a process indicative of broad structural transformations, Ong and Collier conceive of globalisation as “a problem-space in which contemporary anthropological problems are framed” (2005: 5). Ong and Collier treat globalisation not as a theoretical concept, but rather as a tool of anthropological inquiry. In other words, their application of theory helps to materialise elusive modernist objects of study. It is perhaps useful at this juncture to clarify how Ong and Collier conceive of the term “global assemblage”:

An assemblage is the product of multiple determinations that are not reducible to a single logic. The temporality of an assemblage is emergent. It does not always involve new forms, but forms that are shifting, in formation, or at stake. As a composite concept, the term “global assemblage” suggests inherent tensions: global implies broadly encompassing, seamless, and mobile; assemblage implies heterogeneous, contingent, unstable, partial, and situated (2005: 12).

By introducing the concept of “global assemblages”, Ong and Collier suggest that contemporary transformations and global phenomena are articulated through phenomena such as technologies, ethical regimes as well as administrative and governance structures. These versatile phenomena or “global forms” are the base units that merge to form symbiotic assemblages. These forms are at once “abstractable, mobile and dynamic” (Ong and Collier 2005: 4), meaning that such phenomena come to be significant irrespective of social context. Ong and Collier

advocate close readings of assemblages where these global forms converge on the basis that:

As global forms are articulated in specific situations – or territorialized in *assemblages* – they define new material, collective and discursive relationships. These “global assemblages” are sites for the formation and reformation of...*anthropological problems*. They are domains in which the forms and values of individual and collective existence are problematized or at stake in the sense that they are subject to technological, political and ethical reflection and intervention” (2005: 4).

In other words, assemblages represent unique, serendipitous, multifarious and temporally specific ensembles of heterogeneous elements (i.e. history, politics, economics, ethics and technologies) that come together as a result of specific conduits of expertise and capital. Olds and Thrift highlight that “assemblages differ from structures in that they consist of cofunctioning ‘symbiotic elements,’ which may be quite unlike (but have ‘agreements of convenience’) and coevolve with other assemblages, mutating into something else, which both parties have built” (2005: 271). The historically contingent configuration of previously disparate elements (e.g. objects and subjectivities of social systems) often result in novel and unintended consequences.

The WCMC-Q medical programme – replete with its technical infrastructures, administrative systems and values regime – is regarded as a standardised package subject to control and valuation rendering it a functional form in a diverse array of settings.³⁴ As a result, the degree retains many of its key features during the process of its move. But what I am interested in specifically is how social actors subtly translate this knowledge and contribute towards it in the new setting resulting in innovative technical, social and administrative adaptations necessary to accommodate its transfer.

According to Ong and Collier, global forms possess the following elements:

³⁴ WCMC also has partnerships in Brazil, Haiti, India, Peru and Tanzania.

...a distinctive capacity for decontextualization and recontextualization, abstractability and movement, across diverse social and cultural situations and spheres of life. Global forms are able to assimilate themselves into new environments, to code heterogeneous contexts and objects in terms that are amenable to control and valuation...Global forms are delimited by specific technical infrastructures, administrative apparatuses, or value regimes, not by the vagaries of a social or cultural field (2005: 11).

The medical degree constitutes one such phenomenon. Facilitated as it is through “complex infrastructural conditions”, like other global forms, the transnational college also “engage[s] with other elements occupying a common field in contingent, uneasy, unstable interrelationships” (Ong and Collier 2005: 12). The opportunities that “assemblage” offers for highlighting how supposedly universal artefacts transform in specific circumstances makes it particularly germane to a discussion of WCMC-Q. In particular, the interplay of ethics, technology and institutional forms are highlighted in this study.

A systematic examination of assemblages reveals reflection and interrogation on part of the actors engaging with the global forms. For example, some scenarios force actors to vacillate “between modes of reflection and intervention; when for instance, technical modes of reflection and action break down, and ethical or political reflection – or alternate frames of technical response – emerge in their stead” (Ong and Collier 2005: 14). An example of an “assemblage” in action is seen in Dunn’s (2005) *Tale of Two Sausages*, an ethnographic account of how Poland’s entry to the EU resulted in the implementation of novel regulatory bodies, the introduction of new technologies of meat production and inspection, and new classifications in the minds of pig farmers of who eats good meat and who eats rubbish.

In any given context there exist explicit and implicit codes of conduct that structure the community and constrain the way that individuals act. The reactions elicited by global assemblages are often indicative of socially attuned actors’ intuitive abilities to decode situations and to recognise and respond to misalignment occurring in the

social sphere. WCMC-Q's programme enables us to examine how the students reflect upon it and call their training into question. Thinking of WCMC-Q as an assemblage provides a useful conceptual apparatus capturing the far-reaching affiliations, actors, processes, and evolving societal and institutional conditions.

WCMC-Q as a global assemblage

When asked in an interview whether she considered the medical degree to be an import – in the sense of bringing American education into the country – or an export in providing educational opportunities to the Gulf region, I was struck by Sheikha Moza's response: "Knowledge has no nationality. Nobody should have a monopoly on knowledge. It is through the mutation of knowledge that creates culture and it is enriched as it evolves and travels." The concept of global assemblages articulated above, together with HH's belief that knowledge grows as it travels, is definitely a useful way to test anthropologically the limits of Cornell's claims for its medical programme as immutable. HH's notion of a transformed and mutually constituted educational product resonates with the concept of "global forms" insofar as novel processes (e.g. new chains of command, internal rules, contractual agreements) have actualised and new forms of pedagogy (see Chapter 5), sociality (coeducation), knowledge and performance have emerged out of the WCMC-Q assemblage.

WCMC-Q functions as a site where the global, national and local intersect and how each is brought to light in the day-to-day life of a group of actors. As the product of a temporally specific historical, political and economic conjuncture, if treated as an assemblage, the transnational programme lends itself well to a study of some of the big questions or "anthropological problems" associated with globalisation. WCMC-Q is after all an assemblage of powerful players and negotiated interests being wielded by Qatar's magistracy in order to pursue an agenda of modernisation. In particular, treating it as an assemblage affords an opportunity to examine dynamic interactions of "knowledge forms, modes of technical intervention, and institutional arrangements" (Ong and Collier 2005: 15). In addition to functioning as a node in

the cultural circuit of capital and expertise,³⁵ as will be seen in forthcoming chapters, the programme is itself an amalgamation of institutions, technologies, subjectivities, infrastructures and social actors, the transformations thereof and the emergence of problems therefrom potentially contribute to our understanding of certain “anthropological problems”. For instance, “neoliberal ethics” is one such problem that can be probed by treating WCMC-Q as a global assemblage owing to the conjunction of ethics, technological apparatus and spectrum of medical facilities aggregated in the educational transplant. One of the principal distinctions in logic entangled in this instance is between the distinctive neoliberalisms of Cornell and QF.

Cornell’s globalising medical college provides a valuable site for understanding how students redefine themselves in light of their transnational educational experiences. In turning my attention to a tertiary medical institution in the developing nation of Qatar where hitherto there was no legacy of domestic medical training, the recent importation of an exogenous model homologous to its Western counterpart, presents an opportunity to chart global processes whilst observing the ways in which the institution positions itself in a specific social realm (Fahys 1998). The institution comprises “multiple determinations that can neither be reduced to a single logic”, nor conceived without (Ong and Collier 2004: 12). As such, the conjuncture of historical events, political and institutional agendas, economic realities, technological advances and flows of capital and expertise are worth examining in detail for these are the conditions in which WCMC-Q is sustained and enriched.

³⁵ The composition of the Joint Advisory Board is a veritable roll call of the Who’s Who in international medicine. Its membership provides a snapshot of the broad network of domestic and international stakeholders involved in the programme and is indicative of how WCMC-Q serves as contemporary exemplar of a global assemblage. For a full list of members see Appendix O.

CHAPTER THREE

The Grand Experiment: Transplanting Medical Education

“It is a very proud day for Cornell University, as we celebrate the successful culmination of the first phase of a grand experiment. In this experiment, we have sought, at the request of and with the support of Her Highness and the Qatar Foundation, to transplant the fragile seed of American-style medical education to another culture, another country, another context.”

*- David J. Skorton
President, Cornell University
8 May 2008*

In this chapter I propose the metaphor of the “educational transplant” as a useful heuristic device to explain and trace the transformations that an American medical education undergoes as it is transferred from NY to Doha.

In the previous chapter, I discussed the tendency in the globalisation literature to borrow concepts from the business world, so the products and services that traverse the globe are likened to commodities. That globalisation discourse is saturated with transactional language means that producers and consumers are clearly delineated and much emphasis is placed on the unilateral monetary exchange (usually from the periphery to the centre) that occurs between the two parties. While this is useful insofar as it conveys the notion of a transaction occurring between two different parties (e.g. individuals, nations) and the mobility of the package, I would argue that this global commodity metaphor tends to privilege an exporter bias and fails to adequately consider the local end-users who invariably appropriate the product in accordance with their own needs. Conceived as a simple commodity transaction not only obscures how supposedly universal epistemological programmes are transformed as they are exported, but also conveys the impression that the transaction concludes immediately upon receipt of the good or service.

I would suggest instead that the metaphor of transplantation is more apposite for discussions involving the global circuit of educational goods on the basis that it considers the degree as something harvested or transplanted (analogous to a plant or an organ) and because it also acknowledges that the form has to be sutured into a new context, or watered, pruned and fertilised to allow it to take root and thrive in new ground.

Organ transplantation is a key theme in the anthropology of globalisation. As organ transplants have become routinised medical interventions performed in health care systems throughout the world, certain inequalities have emerged with regard to who can and cannot access these life-altering procedures (i.e. spatial, financial constraints). Harvested organs may be exported from poor countries to rich, or patients in need of transplants travel abroad for surgery. As a result, much of the anthropology of transplants, notably Nancy Scheper-Hughes et al., has focused on the inequities and horrors of underprivileged donors ruthlessly and often fatally exploited for rich recipients – a drain or even a ripping out of flesh and blood that recreates the immoral power hierarchies of global flows between rich and poor nations and the indifference of privileged individuals to the sufferings of the poor that underpin their privilege. But others, like Renee Fox and Judith Swazey (1992, Fox 1996) as well as Lesley Sharp (2006) are more interested in the feelings of gratitude (sometimes tempered with resentment at the moral obligation) and the striking emotions of identification that many recipients experience – here the moral and spiritual power of the donor is a central theme. Although much of this kind of research has been carried out in North America, and is therefore heavily marked by local cultures of the gift as well as ethno-biologies (see M. Lock, *Twice Dead*), this latter body of research provides some interesting framings for how the WCMC faculty and various types of Qatari and Gulf recipients perceive the nature of the transfer as well as its impact. Issues of transfers across class, race and ethnicity loom large in all these debates.

The anthropological debates concerned with the globalisation of organ transplants (and with the globalisation of education) do include critical consideration of the question of “gifting” and its significance in different contexts and to different actors. Thus, organ transplants (or general “donations” of bodily substances such as blood) are conceived as gifts in much of the anthropological literature. Even though in Qatar the view is that the Medical Program is not a gift but a purchase, at least at the Cornell end, and in the very term “transplant” (used by some faculty), there is an implicit hierarchy of vitality and creativity between the source of the transplant and the recipient, an awareness of a level of value that goes beyond monetary equivalents. There is a troubling inversion of the usual relations of “bestowing”, then, when poor Asians sell their organs to rich Western patients; and as we can see in many universities, the assumption of would-be global Western educational institutions is that Westerners graciously bestow their own superior knowledge upon ignorant foreigners in exchange for money. Yet, the Qatari purchasers (the recipients) of the Western degree see it as a simple market transaction with no implications of future obligation or dependency on their part.

Transplantation captures the nuances and complexities involved in the transfer of pedagogical models. Far from being simple transfers, “transplants change as they move; they rarely merely fill a vacuum or wholly replace the existing order”, but rather, adapt and graft onto new bodies and settings (Nelken 2006: 937). Transplant procedures do not always adhere to conclusive reception dates, but can be convoluted processes, requiring prolonged monitoring in order to ensure that the foreign body is sustained in the new environment (e.g. post-transplant recovery). In other words, the transplant metaphor considers both the requirements for implementation, as well as the conditions for success of a transferred cultural form (Nelken 2006: 938). To overlook these latter stages is to ignore important agents of change as cultural forms are relocated. The organ transplant metaphor not only accounts for the institutional recipients and local actors who mediate educational transplants, but also provides scope for the assemblage of value regimes, technological improvements and administrative systems that delineate the conditions that make such transplantation

possible, as well as charting the complex process involved in such interventions (the 5-stages are outlined below).

Like global phenomena discussed in the previous chapter, the global trade in organs is bringing together remote sites “into intimate interaction” (Ong and Collier 2005: 11). Inda and Rosaldo point out that the dislodging of cultural forms (organs/degree programme for my purposes) constitutes only half of the process. Deterritorialisation is associated with reterritorialisation, a process that sees the “reinsertion...in new time-space contexts” (Inda and Rosaldo 2002: 11). They contend that both deterritorialisation and reterritorialisation occur simultaneously and that they are constituent parts of the same process. Although the cultural forms are mobile, they cannot be excised from one context without being introduced somewhere else. The word “de/territorialization” is deployed to underscore the fact that regardless of location, cultural forms are always fixed somewhere. While I would challenge the fixity and contemporaneity of the processes on the basis that the physical transfer of cultural forms needs to be taken into account, Inda and Rosaldo’s use of the terms “reinscription”, “reinsertion” and “relocalization” usefully emphasis the re-embedment phase.

Further, Inda and Rosaldo acknowledge that culture has often been conceived of as being “rooted in soil” (2002: 11). Conceptualised as a propagated plant, a cultural form can be harvested or uprooted from its point of origin, physically transferred and replanted in soil elsewhere. Provided the seedling or cutting is carefully cultivated, it may continue to thrive in an alternate setting. The plant or cutting retains its genetic material and some traits from the original context but once replanted in a different environment, it has to adjust to the new soil (i.e. pH levels, moisture and mineral content) and re-establish its root system. Then new attributes and strains may emerge, generating new forms of diversity.

Similarly, and perhaps analogically more apt, the word transplant also connotes organ transplantation. In likening an aspect of a culture to a vivisected organ that is

subsequently grafted onto another body, organ transplants convey the sense of the cultural form being reinserted into another host, underscoring the impact that such a procedure has on its human actors. The fact that transplants can be uplifted from one context and viable in another is testament not only to their robustness, but also to their ability to adapt to alien bodies. It is also suggestive of nascent forms resulting from the new circumstances. That the agricultural term “harvest” is used in conjunction with organ procurement – both of which carry the connotations of growth and renewal – is particularly apposite given the restorative and curative capacity that Qatar’s educational transplants are meant to activate (see below) (Sharp 1995: 370).

Transplanting medical education

Cornell became the first American university to confer its medical degree overseas on May 8, 2008. In his commencement address to the inaugural graduates, President Skorton articulated a question that my anthropological fieldwork had originally set out to answer: “Can one transplant the complex and intricate process of creating physicians in the American tradition to another culture?”

That the president himself twice likened Cornell’s medical education to a “transplant” is illuminating. His first reference is to transplanting “a fragile seed”, suggesting transplants in the horticultural sense as discussed above. Unqualified, his second reference broadens the scope of interpretation to include transplants in the medical sense. Much to the dismay of my informants, I have decided to cite Wikipedia’s definition of organ transplantation because of its graphic description, which defines it as, “the moving of an organ from one body to another, for the purpose of replacing the recipient’s damaged or failing organ with a working one from the donor site.”³⁶ Referring to Cornell’s medical programme as a “transplant”

³⁶ I was urged at length to use UpToDate or PubMed – the highly esteemed evidence-based, peer-reviewed Internet resources favoured by Cornell students in Doha. The latter defines transplants as “organs, tissues, or cells taken from the body for grafting...into another individual” (Dorland, 28th ed.).

conveys the notion that the degree programme is excised in NY, put on ice, flown seven thousand miles away and transplanted into Qatar.

Making the metaphor more specific adds to its aptness. If one considers specifically living-donor partial organ transplants (as distinct from other types of organ transplant where the donor/cadaver may lose the organ entirely, leaving in its place a hollow cavity), only a section of the specific organ (i.e. liver, pancreas, kidney) is removed.³⁷ Clearly, Cornell in NY does not divest itself of its medical programme in order to deliver it in Qatar, but rather delivers the requisite expertise and materials (e.g. faculty, curricular package, cadavers, institutional framework) in order to introduce, support and sustain the nascent medical campus. WCMC-Q is for all intents and purposes a regenerative derivative or offshoot of the original programme.

I would argue that the president's choice of metaphor is fitting precisely because Cornell as an institution claims that the educational transplant is a derivative of the "same degree" as the one found in America (i.e. part of the same organ in different hosts). Far from being a simple case of "cut and paste", however, Dean Skorton's reference may also be read as intimating the complexities involved in transplant interventions. It is a loaded metaphor derived from medical vernacular and for this reason provides a useful, multi-faceted rhetoric through which to examine new forms propagated by a degree transplanted from an American institutional donor to Gulf recipients. Technicalities aside, once in place, a viable transplant is intended to repair an underperforming system.

Restorative transplants are necessarily transformative in nature and so the processes of extraction, substitution and the transplant's capacity to alter bodies are of immediate interest from an anthropological perspective. This is not to suggest that the organ recipients (be it the nation, an institution or an individual) are passive, but

³⁷ Kidney transplants can refer to nephrectomies where one of the two kidneys is transplanted, or partial transplants where only part of the organ is harvested. The fact that humans can survive and go on to lead productive lives with a single kidney has resulted in the prolific global commodification of this particular organ. For a sample of literature dealing with kidneys see Cohen 2002, Sheper-Hughes 2002 and Fishman 1998.

rather they are actively (though perhaps at times unconsciously) involved in the process. Examples of recipient agency include: the Qatari leadership initiating Cornell's recruitment; the governmental hospitals seeking global JCI accreditation; and the students' decisions to embark on the laborious medical school application process (MCATs, TOEFL tests, written application and interview) in order to study at WCMC-Q. Participants on both the delivery side and the reception side of the medical programme have demonstrated active commitment and prolonged engagement throughout the process to ensure the success of the transnational educational transplant.

Thus, the perspective employed in this dissertation is that of the organ transplant and the tenets are medical ones. Organ transplantation involves a five-step process: evaluation; organ procurement; transplant surgery; post-operative recovery and long-term management. These five steps run parallel to the evaluation, recruitment, establishment, implementation and management of Cornell's medical degree as it is harvested and transported to the Gulf. An overview of the transplant process as it occurs academically seems an informative way to ground the metaphor, whilst providing some background information about the educational enterprise. In using the transplant metaphor, medical terms such as donors, recipients, selection criteria, matching,³⁸ transplant technology, rejection, immunosuppression and grafting take on dual meanings. In harnessing this professional language, I seek to imbue this dissertation with a professional currency, one that makes sense to the people involved in the transplant process, the academics of medicine.

The transplant metaphor may not be a perfect but it is illuminating, demonstrating as it does the sequence of procedures through which a strong and healthy organ/partial organ – the educational programme – is found and matched, transported and inserted in a foreign host, all the while providing insight into the buffers that need to be in place to both maintain the integrity of the organ in transit and to prevent transplant

³⁸ Acceptance to medical residency programmes is a competitive process referred to as “matching” and is discussed in more detail below.

rejection once the organ is in situ. The key is to consider the end users/products – the modified structures, the new bodies, the altered lives, new subjectivities and identities of the recipients that result from the transplantation.

Transplants 101

The first successful organ transplant (meaning it survived more than six months) occurred in the US in 1954 (Toledo-Pereyra and Toledo 2008: 133). Since then, the most serious complication associated with transplantation has been the possibility of organ rejection. This refers to a situation in which the donor organ is not accepted by the body of the transplant recipient. Detecting a foreign entity, the recipient's immune system attacks and destroys the foreign tissue. The likelihood of transplant rejection can be reduced through serotyping³⁹ to determine the most suitable donor-recipient match as well as a strict regime of immunosuppressant drugs. Carefully monitored, these drugs enable physicians to manage chronic rejection and increase the survival of both the patient and transplant.

Evaluation process

Long before a transplant takes place, the recipient participates in an extensive screening process. An exacting procedure, "transplantation is a complicated, time-consuming, and emotionally draining process for organ recipients and their kin. Before patients are approved for transplant and thus put on an official waiting list they must undergo an extensive and invasive battery of tests" (Sharp 1995: 368).

Education City was an initiative of HH, aided and executed by QF President Dr. Fathy Saoud and there were no other Qatari organisations involved. When the World Bank was asked by the Planning Council of Qatar and QF to help them conduct a knowledge economy assessment of Qatar and to help formulate a knowledge-based

³⁹ Serotyping is the process used to determine tissue compatibility.

economy vision in 2007 (a full seven years after WCMC first commenced negotiations with QF) it noted that:

Qatar [was] already implementing a number of knowledge economy measures and projects but many of these projects were initiated without an overall coherent long-term vision developed with inputs from key stakeholders” (World Bank 2007b: 2).

According to the QF President, when QF’s Board of Management first conceived of the idea of Education City, it conducted a markets need analysis (this document was not available for public distribution) wherein they identified a need for a medical school, an engineering school and a business school. Based on this needs assessment, it became apparent that setting up a medical school should be their first priority. In my interview with the President of QF, he stated there were three important factors:

First, there was no other medical school in the country. Second, we could not speak about high quality health care without a medical school. This is because a medical school not only produces physicians, but because a medical school can impact the quality of health care in hospitals and primary health care centres in the country...And we believe that you cannot actually have the best health care without a strong component of research and the presence of a medical school to do that is very good (21 September 2008).

With its vision of modernising various sectors and implementing international standards in health care provision, QF was keen to recruit the “best of the best” and looked West on the basis that as yet, none of the regional universities “[had] been able to communicate on the international scene” (ibid). As much of Education City’s initial development was done on an ad hoc basis, there is little in the way of archival evidence in the form of policy documents, organisational charts, funding documents or strategic plans (though a plethora of documents are produced later on). The absence of these artefacts of institutional life documenting their intentions and execution of the project are indicative both of the autonomy afforded to HH and the

QF President and the lack of transparency required of the leadership.⁴⁰ It is noteworthy that QF's increased production and circulation of documentary materials coincides with the arrival of the American universities and parallels their prolific auto-documentary practices.⁴¹

Procurement – Finding a suitable donor-recipient match

Medicine, like other professions, is a restricted domain due to the fact that it limits access to a discrete body of knowledge; exerts a monopoly over its services; subscribes to a code of ethics; and the structure and content of its extensive training is dictated and monitored by the profession itself. This restricted model of professional education renders those in possession of medical knowledge as potential brokers of an exclusive product that is difficult to replicate, thus placing them in a powerful position to negotiate the terms and conditions of the expansion and dissemination of the training package.

In the late nineties, QF Board members met with universities in the UK and Europe but found that their academic systems were inflexible and less compatible than those in the US. In an interview with Her Highness, she denied that nationalities and geography had influenced their decision, but stated rather contentiously that, “it was more about the quality, qualification and readiness of the college. We screened the best schools and the American ones were ready. The UK was not ready. The UK was not mentally ready to recognise the necessity of being global.” As noted in the preceding chapter, there are a number of funding factors that have rendered American

⁴⁰ In her book *The Network Inside Out* (2000) and her edited volume *Documents* (2006), anthropologist Annalise Riles introduces a theoretical approach to the aesthetics of institutional artefacts and underscores the important contribution that documents make to the understanding of transnational phenomena.

⁴¹ As educational transplants are becoming commonplace, institutional accountability comprises an important cornerstone of contract negotiations. Marilyn Strathern (2000a; 2000b) writes about the emergence of audit cultures within academia. Universities are implementing this global phenomenon and are being structured in ways that make them “auditable” (e.g. research and teaching assessments) and therefore more accountable. The audit process involves continuous performance and quality assessment and requires evidence of the realisation of goals. See also Shore and Wright 2000.

universities more entrepreneurial in their approach to education and willing to expand their brands abroad, in comparison with UK universities which, being state-funded perhaps have not felt as pressing a commercial need to expand overseas. Further, while the current proliferation of internationalised American business schools makes for easy recruitment of business colleges, this was not the case with medical schools. Although there exist many examples of partnerships and research collaborations, medical education is not yet available on a global scale. In short, there was a donor shortage. Having narrowed their search to US institutional donors, QF used the most authoritative mechanism they had at their disposal – the World University Rankings – from which they actively sought out top tier medical schools. Cornell was among the top ranked medical institutions both in terms of academics and research.

QF's recruitment process coincided with the March 1999 visit of US Congresswomen Sue Kelly (Republican-NY) and Carolyn Maloney (Democrat-NY) to Qatar (US Embassy of Qatar 2010). They headed a congressional delegation that oversaw Qatar's election of a Central Municipal Council, the first election that allowed women the right to vote and the freedom to run for public office. During their visit, they met Sheikha Moza who explained her vision of establishing Education City and the pressing need to recruit a medical school. Upon her return to the US, Congresswoman Kelly contacted some of her friends who were on Cornell's Board who put her in touch with the Dean Antonio Gotto of WCMC.

Just as companies tender contracts, QF also approached a number of other medical schools. The selection criteria were explicit; QF would reject any ventures that simply proposed setting up an adjunct satellite institution. QF was only willing to recruit an institution that guaranteed to offer a medical education of the same calibre and thus willing to confer the same degree as that offered in the US.

While Cornell was interested in theory, establishing a new academic programme that could guarantee delivery of the same quality of education in a region of the world

they knew little about was daunting. Cornell also harboured concerns related to potential risk to the Cornell brand, the feasibility of providing a degree seven thousand miles away from the NY campus, the academic calibre of potential students, the difficulty of recruiting suitable faculty and the possibility of hostility on the part of an Arab-Islamic community to an American institution (even prior to 9/11). Thus, during this preliminary stage it was essential for Cornell to measure Qatari commitment to the project as well as evaluate the risks and benefits of the venture.

Before a final formal agreement was signed and announced in NY, a protracted series of meetings took place during which Cornell set out its own stipulations. The first visit of the planning team, at the invitation of QF, was in May 2000 when they met with HH, senior members of QF and the Minister of Health. Subsequent face-to-face meetings took place in Doha, NY and London. The volume of paperwork generated during and as a result of these meetings (e.g. Memorandum of Understanding, Proclamation, legal contracts, minutes of meetings) points to the importance of the documents in stabilising international networks. These shared, tangible and archived contractual documents ensure that verbal agreements are constituted as a form of action.

WCMC required the same kind of autonomy and governance in Qatar that they have in the US. Dean Alonso, a distinguished Argentinian pathologist who had been serving as the Senior Associate Dean for Academic Affairs in NY, and eventually came to serve as the inaugural dean of the Qatar campus, was a key negotiator. In Dean Alonso's account of the negotiations, he said that the Cornell Board consented, but stipulated that such consent was, "on the condition that [they] give us the environment, the prerequisites, the resources and the freedom to train medical students the way we do it in New York" (Interview, Alonso 2008). QF agreed to these conditions and signed what I have been reliably informed was "the most one-sided, water-tight contract ever drafted by NY lawyers." The Announcement of Agreement on April 9, 2001 was set out in a proclamation embossed with both

stakeholders' seals (Appendix B). With Cornell formally agreeing to award their MD degree to students who study in Qatar, QF had finally found a successful match. Commenting on donor compatibility, the QF President stated: "We were fortunate with the leadership in Cornell who has also seen the great opportunity of being partners and going globally, contributing to global education. So both partners have a shared vision." Yet turning this "shared vision" into a reality came at significant expense.

Educational transplants are an expensive business. Like wealthy and privileged recipients who can tap into the circulation and availability of organs, Qatar can afford the luxury of transplantation and was in a position to procure an educational transplant in a market scarce of American medical programmes. QF agreed to absorb all financial expenditures associated with the construction and operation of WCMC-Q over the next eleven years at an estimated cost of US \$750 million. This sum includes Cornell's management fee plus an undisclosed donation to the medical school in NY (Cornell Chronicle 2001).

That several of Qatar's development needs correspond closely to WCMC's tripartite mission of "education, research and high-quality patient care" made it a desirable match. The establishment of a medical college is regarded both as a much needed breeding ground for domestic physicians and as an important first step towards establishing Qatar as a centre of excellence in biomedical and scientific research.

Transplanting the Medical Program

WCMC in NY provides the curriculum, senior leadership, teaching materials, anatomical material and visiting faculty for the Doha campus. The Medical Program replicates the curriculum, quality and standards of WCMC in NYC. Despite its distance from the "centre", WCMC-Q's website states unequivocally that WCMC-Q is:

...an integral part of Weill Cornell Medical College in New York and thus follows the same medical educational program; the two programs are educationally equivalent. Students that graduate from WCMC-Q will, like their peers in New York City, receive a Cornell University MD degree.

The Qatari campus employs the same language, frameworks, procedures, standards and pedagogical strategies used in the US. The transplanted institutional form requires students to become acquainted with an imported curriculum structure, based on content and materials derived from America and delivered by a predominantly Western faculty. While the content of the lectures and curricular material are sometimes beyond the Arab students' realm of experience (e.g. familiarity with different types of alcohol, use of tampons), once learned, the students are imbued with a practical bilingualism that helps them to function in both local and foreign clinical settings.

Contrary to Inda and Rosaldo's assertion of synchronicity discussed in the previous chapter, in transplantation, procurement must by necessity precede implantation. By extension, the Medical Program and its constituent parts first has to be dislodged from its NY setting, transferred, and subsequently re-embedded in the Qatari context. In the absence of a pre-medical programme that would adequately prepare and furnish the Gulf students with the prerequisites required for admission to the Medical Program, Cornell's first task was to implement an intensive Pre-medical Program. An email correspondence from the dean responsible for implementing the Pre-medical Program illustrates the nuances of educational transplantation:

I started work before the official signing ceremony and had approximately a year to get things organised from the Pre-medical perspective. Although we did not occupy the building until August 2003, we started straight away on the building design and worked for a day every week with an architectural firm in Manhattan that had previously worked with the Medical College in NYC. The main focus was on the design of teaching labs and lecture halls. After we arrived in Doha in February 2002, we had to renovate Qatar Academy as a temporary facility for the first batch of students who arrived in August 2002. So once again, architects

with experience in laboratory construction were involved. They came from Dubai. The main work related to obtaining the equipment for the teaching labs. Since the laboratory courses were almost identical to those given in Ithaca it became essentially about obtaining huge lists of chemicals etcetera from the Ithaca labs. Importation permits were, at first, difficult. Biology was a problem as the labs are quite complex involving special rooms for plants and incubators for bacterial work. Physics needed the special construction of demonstration models used both in the labs and the lectures. Another priority was faculty and technical staff recruitment. The latter were mostly recruited locally...It went surprisingly well and we had an excellent Dean of Admissions to help us recruit our first batch of students...The main problem was ensuring that ordering and delivery of equipment proceeded smoothly (which it did not) (personal comm. 7 September, 2010).

Thus, the transfer of knowledge is scaffolded on a host of processes that include: relocation, recruitment, shipping, construction and sourcing equipment and materials.

Be it electronically or by air, the educational package for the WCMC-Q programme – complete with course materials, lectures, exams, faculty, scientific instruments, white coats and cadavers – includes many components transplanted directly from NY. The absence of certain objects, bodies and infrastructure occasionally requires creative solutions. Commenting on delivering the same medical programme in the non-American jurisdiction, one senior administrator observed:

I mean it really is, it's a sort of transplant... This is as close to being identical as we can be... It's been a wonderful experiment in that way... Essentially we are meant to be the same, and given the fact that the relationship with students and so on is different here, not a great deal is truly different.⁴² Our courses are the same both in the Pre-Medical and in the Medical, but our facilities here are better, our labs and so on. They allow us to do things that you can't do back on the main campus in terms of exploring new areas and laboratory teaching for example. We can do those things but other than that this is a replica of what's going on there in many ways. The Course Directors who visit

⁴² The teacher-student ratio is much higher in Qatar and professors and students have an opportunity to get to know each other. As a result, the intensive two-year Pre-medical Program is quite paternalistic in nature.

from NY to audit the quality of the courses each year can testify to that. So, in many ways it's very similar and in some ways it's different.

Despite likening the programme to a transplant, the word “replica” and the phrase “close to being identical” also suggest the idea of cloning. It is interesting that the administrator frames the differences as purely advantageous and to the benefit of the Qatari programme.

Proceeding cautiously, Cornell initially focused on the teaching component of its tripartite mission. According to the Dean, “the risks were considered so great, the challenges so extraordinary and mostly [because] there was no precedent it was decided to concentrate on the educational mission first.” Two years later and more than half of the original class down, they commenced the Medical Program in the new medical building.⁴³



Figure 6. Students in a laboratory. Photo: Martin Marion

Like an organ transplant, the medical educational transplant delivered to Doha cannot function in isolation, but rather its very survival necessitates integration – or metaphorically speaking – grafting onto extant health care and educational structures. To this end, WCMC-Q and NYPH entered into an Affiliation Agreement with Hamad Medical Corporation, the main health care provider in Qatar.

⁴³ According to the Dean's Bulletin, Cornell received 101 applications for the Pre-Medical Program of whom 55 were interviewed and 31 were accepted. The inaugural class commenced with twenty-seven students, comprising 14 Qatari nationals and 13 international students, all were of Arabic origin. Seventy percent of the first intake was female. Two students did not progress beyond first year. At the end of second year a further fourteen students failed to advance into the Medical Program. Two external candidates were accepted into first year of the Medical Program.

Prior to the arrival of Cornell, HMC was neither a teaching hospital, nor had it been recognised by the Joint Commission International (JCI), an international arm of the Joint Commission that accredits American health care institutions. This was problematic for Cornell as it could not offer all the constituent parts of its medical curriculum in Qatar at the beginning because some local health care facilities did not meet acceptable standards. To circumvent the problem, WCMC-Q students were sent to complete certain subinternships and electives at NYPH and other hospitals in the metropole. HMC and Cornell have worked together closely in an attempt to upgrade the status of the pre-existing Qatari hospitals, most of which were awarded JCI accreditation at varying points in 2006. Specifically, this has involved the cosmetic overhaul of medical facilities over the past six years, accompanied by a concerted effort to improve the quality of health care services at HMC. To this end, HMC has instituted a series of structural and procedural changes as per the recommendations of JCI.

One senior Qatari official acknowledges the transformative impact Cornell's arrival has had: "They were not only concerned with delivering the medical education programme but they have contributed significantly in upgrading the quality of health services in HMC and in the primary health care sector." Until such a time as Sidra, the American-modelled specialty teaching hospital, is operational, much of the clinical component of WCMC-Q's programme will occur within the pre-existing Qatari medical facilities. Such a collaboration required HMC to attain an international accreditation in order for Cornell to consider it as a suitable site in which they could implement an internship programme.

Similarly, just as organs need an adequate blood supply, WCMC-C relies on local, regional and international schools to supply high calibre students who are sufficiently prepared for the rigours of the American-styled curriculum. Without these students, there would cease to be a medical school. Therefore, Cornell works closely with

educators, schools and governmental bodies in a bid to recruit top tier students from local and regional vicinities.⁴⁴

An educational package is never transplanted “into a historical socio-economic vacuum and, thus, may not function as expected when it links poorly with the local set of institutions...local specificities may exist that help or hinder their partaking” (Pessali, forthcoming: 7). In other words, specificities and compatibility issues with the *corpus alienum* may still materialise in spite of all precautions taken.

Immunosuppression and the potential for organ rejection

No intervention is without its complications and this is often amplified when it is a pioneering venture such as that found at WCMC-Q. The transfer of an MD degree developed in the Upper East Side of Manhattan to a predominantly Muslim-Arabic setting has not been seamless. Cornell has encountered an environment with promising students who nonetheless arrive at the college with different world-views and different skill sets. The WCMC-Q dean himself acknowledges the need for adjustments in his statement that “replicating the Cornell system in the Middle East doesn’t mean we’re going to do everything exactly the same way. [It is achieved] with a little bit of sensitivity and a little bit of asking for advice and understanding that we are far from home” (Alonso 2006). The institution engages considerable efforts to meet the emotional and educational demands of their new student population, employing student counsellors, recruitment advisors and consultants in a bid to support their new venture.

Despite establishing a medical college, the health care field has struggled in its attempt to recruit Qataris. This may be attributed to the fact that “evidence suggests that many Qataris find the health sector to be less appealing than other industries both because of the nature of the service component and because of the relatively

⁴⁴ For instance, guidance counsellors do not exist in government schools and so WCMC-Q now provides workshops to help students fill out their online applications.

low compensation relative to other sectors” (RAND 2005: 61). Cornell has, however, made a concerted effort to broaden interest in health care careers. In a focus group with physicians working in Qatar, one consultant pointed out that “some barriers to health care careers are cultural problems beyond the purview of WCMC... Becoming a physician requires more years of education and training than many people are willing to endure” (Goodnough 2010). The issue of “wasting time” should one not succeed past the preliminary stages of medical school and the time required to train as a doctor were recurrent throughout my fieldwork.

In order to increase the uptake and efficacy of its educational programme, WCMC-Q has introduced a number of innovative outreach programmes. Cornell offers a one-year Foundation Program to prepare English as a Second Language (ESL) students for the rigours of an English-medium medical training. Three summer academic enrichment programmes on offer function as PR campaigns designed to generate interest in health care careers among young people, attract Qatari students and promote the medical college. In addition, Cornell has also initiated several health awareness campaigns and screening programmes enabling the college to interface with the local community.

Medical students devote much time and energy in their final two years to researching, applying and interviewing for residency posts that commence immediately after graduation. This highly competitive process is referred to as “the match”. Obtaining a coveted residency at a prestigious programme in the US will almost certainly ensure professional success in the future. Despite graduating with “the same degree” as their US counterparts, students graduating from the Doha campus are classified by the American licensing body as International Medical Graduates (IMGs)⁴⁵ on the basis that some of their training took place outside the geographic boundaries of the US or Canada. For those students who undertook the “American” degree as a gateway to the US, might this not indicate a reverse form of organ rejection on part of the American medical community? Some exasperated

⁴⁵ Sometimes referred to as Foreign Medical Graduates (FMGs).

students referred to their programme as being a “reject” before the results of the first match were announced in 2008. Pushing the metaphor, it is almost as if the WCMC-Q degree is regarded as an xenotransplant, perceived by the accreditation body to be alien and substandard on the grounds that it was undertaken outside of the US.

Alternatively, if we return to the aforementioned administrator’s comments about replication and the programme being near identical, it seems as if WCMC offers cloning, but sister institutions in the US fail to recognise the identity of the clone.

Long-term management of the educational transplant

The graduation of the inaugural class and their matches (Appendix M) marked the successful completion of the implementation phase of the educational programme. Everything has now been done once, each course has been taught, and all clerkships have been attended. The academic transplant has now been clinically-trialled and initial observations suggest that the transplant has been a success.

Even though WCMC-Q is now moving into the research phase of their tripartite mission, it is essential that Cornell continue to monitor and improve its educational programme in order to ensure its sustainability. This requires close evaluation of the educational package. To this end, the administration continually seeks feedback in the form of course evaluations, professor evaluations (at the conclusion of each module), faculty meetings, focus groups and regular forums of the student body. Because my time at Cornell coincided with the period during which the programme was just being established, it was not uncommon for impromptu faculty, student or board meetings to be called in order to deal with unanticipated complications. I suspect that as the programme matures the need for emergency get-togethers will be reduced.

During the initial phase, NY based course directors visited the Qatari campus each semester to ensure curriculum standards were being maintained. Each Course Director submitted a report detailing the facilities, course content, assessment and

teaching quality. Again, documentary practices are a ubiquitous feature of the academic institution. Gradually these visits became annual “as there were no concerns in any area, in fact just the opposite; the Course Directors were full of praise” (pers. comm. 16 February 2011).

The Board of Overseers did not travel to Doha on a regular basis but rather representatives would travel to WCMC-Q on an ad hoc basis especially when the Medical Program was initiated. Dean Alonso attended regularly scheduled meetings of the Board in NY. The Joint Advisory Board continues to meet twice a year in Doha.

Life post-transplant – modified bodies

A substantial body of transplant literature is devoted to the issue of the psychosocial consequences associated with organ transfer, highlighting the transformative impact that the receiving of donor parts into one’s body has on the individual’s sense of self (Fox and Swazey 1992; Sharp 1995; Fox 1996). A blurring of boundaries between self and other seems to occur. Organ recipients are purported to undergo an altered notion of self whereby they contemplate and restructure their identities because of the embodiment of the foreign body part (Sharp 1995). In documenting the social and cultural dimensions of organ transplants, anthropologist Renee Fox (1996) reveals that occasionally recipients start to feel they have assumed characteristics of the donor, with some experiencing anxiety concerning:

...the individual and social attributes that may have been transposed into their bodies along with the transplanted organ...recipients experience anthropomorphic concern about whom they have become so closely associated with in this more-than-anatomic way – about the gender, ethnicity, race, religion, education and social class of the donor, along with his or her moral character and way of life (Fox 1996: 254).

Ultimately, the individual’s conception of the self – its definition, boundaries, and relationship to others – is altered because of the transplantation process.

This embodiment of “the other” also finds parallels in Yunxiang Yan’s observations during the 1990s when Chinese families took their children to consume McDonald’s burgers in hopes that they would ingest American skills and talents (1997).

Likewise, Arab recipients of the educational transplant go through their own transformative experiences. Following immersion in the American-style medical programme – where they are exposed to ethical, social and moral dilemmas and confronted with contradictory medical practices – educated Gulf students are forced to reconstruct their sense of self and reformulate their identity. The extent to which medical students are transmuted by the educational transplant, how they grapple with the otherness of their American training and the manner in which the Arab recipients reconstitute their public and private identities in the “post-transplant” phase of their lives will be discussed in more detail in Chapter six.

Sharp observes that, “the first patient to have a particular organ transplanted in a given hospital is the highest honor; if they survive, these patients often occupy high-profile positions at public events” (Sharp 1995: 370). Similarly, the first students to be domestically trained at WCMC-Q were thrust into high-profile positions at public events and showered with media attention throughout every stage of their training. Further, the first Qatari nationals to graduate will probably be rapidly promoted to important administrative posts in HMC due to Qatarization policies (to the detriment of the hospital which will not benefit from their technical skills for long).

The educational transplant has been undertaken not only to restore an insufficient system, but also to further neoliberal goals that will be outlined in the next chapter. Cornell students are heralded as pioneers and self-enterprising individuals participating in an experiment designed to change the face of education and future medical practice in the country. The training provided at WCMC-Q is an integral component of meeting these objectives.

CHAPTER FOUR

Dabbling With Neoliberalism

“Seek knowledge, even as far as China.”

- Hadith

Employed as an explanatory trope, the term “neoliberalism” is used regularly as a modifier of a diverse range of constructs including: economy, ideology, hegemonic project, globalisation, governance, era, climate, environment, state, enterprise and spirit (Collier et al. 2006: 9). The ubiquity of the term reflects its multiplicity of uses and has resulted in reification and excessive use of the concept (Kipnis 2007: 383). However, this fetishisation of neoliberalism renders it difficult to provide an essential definition of the term.⁴⁶ Instead, the concept of neoliberalism is perhaps best comprehended through its application. Used indiscriminately as a blanket term in academia,⁴⁷ the term is used to convey a configuration of overlapping elements (e.g. calculative mechanisms, transparency, accountability, efficiency and enterprise) and subjectivities (e.g. entrepreneurship, self-improvement, competition, responsibility).

Despite being an unfixed term, neoliberalism is an unavoidable point of reference in discussions of the globalisation of higher education in which a neoliberal ideology linking employment security to the development of “human capital” suited for “knowledge economies” prevails. Universities are expected to produce commercially oriented professionals, educated actors who are presumed to be self-interested, market-oriented and contributors to the nation’s socio/economic/political agendas. It is now common practice in the Gulf region to procure educational transplants in order to provide specific job training in line with market needs.

⁴⁶ Wittgenstein uses the word “game” (e.g. Olympic games, ball games, card games) as an exemplar to demonstrate that though lacking a codified definition, concepts become recognisable through use and resemblances (1953).

⁴⁷ For a critical approach to neoliberalism, see Collier et al. (2006).

In an attempt to achieve a number of domestic objectives and to better integrate itself into the global economy, the Qatari government has begun to experiment with various neoliberal strategies of governing. In addition to the imposition of market criteria on its citizenry, Qatar has implemented a series of selective neoliberal reforms in its formation of economic, cultural and educational zones. Useful here is Ong's conception of neoliberalism which involves "reconfiguring relationships between governing and the governed, power and knowledge, and sovereignty and territoriality"⁴⁸ in addition to the establishment of "a new relationship between government and knowledge through which governing activities are recast as nonpolitical and nonideological problems that need technical solutions" (2006: 3). As discussed earlier, Qatar's drive to become a competitive knowledge-based society by 2030 is a means of diversifying its economy and a solution geared to reduce the nation's dependence on imported expertise and skilled labour. This agenda has been backed by immense investment to bring knowledge to the people of Qatar in order to optimise and help build a skilled human capital base. Such investment has helped to strengthen and expand post-secondary education in order to cater better to the evolving needs of the workforce.

Mentioned briefly in the introduction, within this thesis, the term "neoliberal" corresponds to the Qatari elite's interventionist model of development and changing practices of governance. These strategies include the introduction of mechanisms of calculative choice designed to reform its citizenry in line with market needs. As will be seen in this chapter, although "global cities" such as Education City are often linked to the production of neoliberal values and subjects (through human capacity building projects and the production of new enterprising individuals and modes of self-formation), a paradox is emerging. Education City's use of educational transplants clearly illustrates the paradox of importing the alien to strengthen the native, and of changing to stay the same. As the case of Education City examined below shows, the goals of the host state may well be much more complex than the

⁴⁸ Though it could be argued that there is nothing specifically neoliberal about this – as it could also apply to the new politics of C18th European nations.

blunt instrument of “neoliberalism” allows for (indeed training Qataris to perform in world arenas, but doing everything possible to keep Qatari values afloat and to nourish a very local set of principles of development).

Some scholars of globalisation suggest that networks of influential supranational institutions contribute to the displacement of weakened sovereign nation states (Sassen 1996). This is not the case in Qatar, where the state’s sovereignty seems to have been strengthened because of globalisation, especially with respect to newly formed connections it has initiated with transnational institutions of higher learning. Far from experiencing a crisis of the state (i.e. diminishing power), Qatar is harnessing global flows in order to open up new opportunities and improve local social conditions. As the Qatari leadership attempts to raise the quality of life for its citizens via the improvement of highly visible domains such as education and medicine, its investment in its domestic population⁴⁹ is intended to serve the dual purposes of endearing itself to its people whilst propelling the nation onto a new global playing field.

An emergent global city⁵⁰

According to geographers Olds and Yeung, both China and Malaysia’s strategic developmental policies are “using cities to connect the nation to the global space of flows, while concurrently using such cities to propel social change (including the development of more reflexive citizens) in particular directions” (2004: 499) through, for instance, monetary investment in technology and infrastructure. On a much smaller scale but in a similar fashion, the Qatari leadership seems to be following some of these precedents in their development of Education City.

⁴⁹ QF literature suggests that this agenda also benefits the broader region.

⁵⁰ For the locus classicus of this term see Sassen (1991).

Though Education City does not officially constitute a city in its own right, it certainly shares many parallels with Olds and Yeung's (2004) emerging city typology. I refer here specifically to the fact that Education City's administrators have the (largely unrestricted) capacity to draw on significant domestic financial resources, exert strong institutional will as well as political legitimacy and that the organisation relies on inward flows of people, goods, services and information from external economies. This assemblage of expertise is compiled for the explicit purpose of educating Qataris to become effective global subjects (neoliberal subjects according to Ong's definition discussed below), but who ultimately contribute to the formation of the nation state.

Seemingly cognisant of the benefits associated with world or global city status; Qatari rulers ultimately seek to shed Doha's developmental status through high-profile development projects throughout the city such as QF's Education City. Similar initiatives include: The Aspire Zone – the site of the 2006 Asian Games; the Museum of Islamic Arts; the cultural village Katara; and the commercial and residential developments Msheireb, West Bay Lagoon, Pearl Island and Lusail City. Anthropologist Sulayman Khalaf refers to such initiatives as “prestigious projects”, suggesting they serve as signifiers of the nation's economic capacity and emblems of the “unlimited good” associated with *khaliji* Arabs (1992: 66; Gardner 2009). QF – the instrument of HH's ambitions – is mobilising institutional will, political fabric and designated financial endowments in a bid to create an artificial global city within the confines of the state. By focusing its efforts on the construction of an academic city, Qatar, like “many nation states in developing countries [is] engaging in novel discursive practices, and mobilizing disproportionate material resources to ‘construct’ representations of entrepreneurial global cities” (Olds and Yeung 2004: 507). Qatar's Education City represents an example of a quasi-global city formation project in the Gulf region.⁵¹

⁵¹ Dubai's Knowledge Village, Abu Dhabi's University City and Global Academic Complex in New Songdo City in South Korea serve as parallel examples.

According to Olds and Yeung, city-states are characterised by the following attributes:

...unique historical and geographical realities because the state is contained within a fully urbanized and spatially constrained territorial unit...they do not have an immediate hinterland within the same national territorial boundaries. To a significant degree, broader regions and more distant parts of the globe become their hinterland. The development of a terrain of extraterritorial influence emerges when the global city-state functions like hyper global cities, both attracting in material and non-material flows, and in functioning as a command and control centre for the flows and networks that reach out at regional (for the most part) and sometimes global scales (2004: 507-508).

Education City is both a self-contained and self-sufficient techno-hub that functions as an independent entity on the outskirts of Doha. The transnational academic institutions, companies and supranational organisations assembled in Education City are there for the explicit purpose of enhancing the nation through the provision of new services and educational opportunities. Education City is a site where extraterritorial expertise interfaces with local stakeholders (e.g. Qatar Petroleum) in the exchange and creation of new knowledge. The clustering of institutions in a localised technological zone “connects the state, as venture capitalist, with foreign research institutions and global companies, creating a network that fosters interactions, risk-taking and innovations among expatriate and local knowledge workers” (Ong 2005: 340). Within this zone, foreign knowledge institutions benefit from lenient policies related to immigration, taxation and law.

In addition to positioning Qatar as a regional and international centre for educational excellence, QF’s support of advanced research aims to promote the creation of new knowledge and technologies, advance the development of existing industries and cultivate new sectors and opportunities. Although Education City does not yet contribute significant outward flows of exports to the benefit of other economies, QF has every intention of achieving this in the future via the synergy of its current academic/technological collaborations (i.e. Qatar National Research Fund). Qatar’s

Science and Technology Park has been specifically incorporated into the grounds to function as an incubator for commercially viable ideas and start-up enterprises developed in Education City.⁵² HH reaffirms the importance of scientific innovation and research in her statement, “I firmly believe that the optimal investment of our resources should not turn us into consumers of knowledge. It should rather encourage us, as well, to produce knowledge” (QF 2007).⁵³ The QF network of institutions is designed to contribute to the exchange of scientific knowledge locally, regionally and globally. Further, promotional literature indicates that Education City “sets out to be an asset not just for Qatar but for the entire Middle East region and beyond...[touching] communities and individuals well beyond the country’s borders” (QF 2007). Not content with being a passive receiver of goods, the leadership of Qatar is determined to participate actively in the global economy via the generation and exportation of novel material and non-material forms. While these global aspirations may represent the interests of the top tier of society, I suspect that few traditional Qataris would comprehend the rulers’ agenda, much less recognise the advantages of becoming global citizens equipped with the skills to participate fully in the global ecumene.

No expense has been spared in the construction of the signature city. Set against a backdrop of futuristic aesthetic and grandiose architecture designed by world-renowned architect Arata Isozaki, the landscape of Education City and similar flagship projects around the region signal that such:

⁵² QSTP opened in Education City in 2009, marking the nation’s first official “Free Zone”. QSTP has been set up as a base for technology-based companies, its objective being “to attract companies and entrepreneurs from around the world, to develop and commercialise their technology in Qatar” (QSTP homepage).

⁵³ According to Butler (2006), there are relatively few scientific publications generated in countries belonging to the Organization of the Islamic Conference. To date, the Arab region is second only to sub-Saharan Africa in its low output of scientists, academic research and scientific publications (Fergany 2006: 33). Cornell’s recruitment represents a concerted effort to redress the region’s poor scientific track record and is supported by a massive financial endowment (Masood 2006). Within the sphere of academia, particularly in scientific disciplines, publications in Western refereed journals “secures privilege” and prestige (Barnett 2005: 787). This patronage and indigenising of science marks a dramatic shift from passive consumption to active production of scientific knowledge. It is also a challenge to the hitherto unquestioned hegemony of the West in the production and definition of authoritative knowledge.

...uber-habitats are signposts of the future intersections of radically conceived designer realities and a millennial world culture...built as hyper-localized hothouses [which] are set to become bastions of over-specialization. At the same time they project a particular cosmopolitanism, with their great potential for cultural overlap, exchange and conflict, standing as they do at the flashpoints of international trade and interaction” (Douglass 2008: 1).

The artificial city-state Education City is situated at a global intersection through which flows of capital, people, materials and information connected to the network of institutions involved in its maintenance move in and out.

The construction of Education City is a manifestation of what the cosmopolitan leadership aspires for Qatar to be in the future and demonstrates its commitment to placing the nation on the world map. Olds and Yeung define “global reach” as the “complex processes through which a city articulates itself into, and seeks to explicitly benefit from participation in the evolving global spaces of flows” (2004: 493). In essence, Education City is the embodiment of Qatar’s “global reach”. As an imagined global city-state, Education City serves as an exemplar of what the nation is setting out to achieve through its infusion of investment and neoliberal strategies. The Qatari government actively intervened to create a globally linked space via the establishment of QF, the investment of capital and the provision and procurement of infrastructure (e.g. ICT, buildings, residences). It is within this space that the Qatari elite is not only trialling a new developmental pathway, but also exerting its sovereignty through the pursuit of universal aspirations (Olds and Yeung 2004: 501).

QF’s website acknowledges the precariousness of its mineral wealth, regarding instead its citizenry’s capacity “to learn, adapt and innovate” as “the only guarantee of lasting prosperity” (QF 2007). The dual tasks of building human capital and creating an advanced knowledge-based society fall under the remit of QF. Many similarities exist between the contemporaneous ascent of Singapore and the establishment of Qatar as knowledge-base hubs. In particular, Old’s (2007)

observations regarding the assumptions and expectations at play in transnational linkages resonate here, as do the development and implementation of new forms of governance geared to accommodate the foreign institutions and their respective agendas.

Paralleling the situation in Singapore, the nation's resources are being harnessed to shape this process of transformation, with particular attention being paid to the exigencies of the state in the medical, engineering and business sectors. Similarly, just as there is a "discursive reframing under way in Singapore", so too is there in Qatar, particularly with regard to its attempts to reposition itself within the realms of academia. Thus, Qatar has found it necessary to market itself to outsiders as liberal, forward thinking and modern in a bid to tap into global flows of intellectual capital and expertise (Olds 2007: 960). In an interview with the President of QF summarised changes that had to be made in order to accommodate foreign universities:

It's not copy and paste. There is a huge vision and there is a lot of insight in the whole project you see. It is not just bringing a university from abroad and putting it here... You have to develop the right type of liberal environment these universities would like to see when they come here. They don't want, and we don't want universities [that] become islands in a country. You have to bring them [over] to ensure that they are comfortable with the whole community, and to see that they are welcomed by the community. The community sees a lot of opportunities of having them here, you see. And we have to commend the leadership of Qatar in making that type of social and cultural infrastructure needed for this project.

The successful recruitment of overseas universities (Table 5) suggests that the leadership of Qatar has effectively implemented the "right type of liberal environment" with the requisite social and cultural infrastructure for the projects (discussed in more depth below). Yet, the president's use of the term "community" warrants some attention. While I suspect he was referring broadly to the people of Qatar as the intended beneficiaries of the neoliberal agenda, in reality the community that prospective universities engage with is far more circumscribed. Generally, the

network of actors that foreign experts encounter in Qatar represents a narrow band of society, namely the privileged, cosmopolitan and adequately educated middle to upper middle students. As noted above, specialised zones like Education City resemble academic environments found beyond national borders more so than its immediate environs. With time, it is hoped that the new individuals and knowledges produced within these zones will extend beyond the borders of the zone itself and map onto the local environment.

As mentioned earlier, the tiny indigenous population combined with the pace of change has been problematic. The demands of Qatar's fast-evolving high-tech society have outpaced the nation's capacity to produce a domestic workforce equipped with the appropriate skills and calibre of expertise required to sustain it, and thus, have had to rely on an army of expatriate workers instead. The nation does not currently possess the requisite expertise, patience or institutional infrastructure. While the affluent state can afford to purchase services from elsewhere as required, the powers-that-be recognise that such short-term solutions:

...will not build the local expertise the country needs to reach a state of sustainability...[whereas, QF investment in partnerships ensures the provision of] experienced professionals who can get locally-based enterprises off the ground. To rectify this situation and to reduce their dependency on outsiders, the joint ventures will in time recruit and train increasing numbers of talented Qataris, and in this way the skills will transfer to the local population" (QF 2007).

In essence, the state is using social engineering to modernise the country and safeguard a sustainable and productive future for its citizens, whilst simultaneously grafting itself onto new global networks.

Expatriate expertise

The state of Qatar is forced to compete for expertise in an expanding global market, especially in the fields of health care and education. Ong notes in her study of

Singaporean flows of expertise that the network of expertise is a zone characterised by friction, “of constant cross-referral between the recent past and the projected future, between rigidity and flexibility, between insiders and outsiders” (2005: 345). Students involved with the Education City enterprise have to mediate between remaining true to their local values and culture while embracing the movement toward modernisation brought about by these experts.

The political and ideological adjustments necessary to establish neoliberalism, whether as the ruling principle of government or as an “insertion”, differ depending on whether the state is originally a social democracy (e.g. Germany and pre-Thatcherite UK), an authoritarian state (China) or an absolute monarchy (Qatar) (Kipnis 2007). It is only in the past decade that neoliberalism has emerged as a characteristic mode of governance in Qatar. This is not to suggest that before this neoliberal practices were entirely absent, but rather, that they are exceptions to, rather than being, the rule.

Even now, neoliberalism is confined to certain spheres of political action within Qatar. In a scenario where power and decision-making are concentrated in the hands of a few strong-minded individuals (e.g. a one-family-run authoritarian state such as exists in both Qatar and Singapore), techniques of governing – including recent neoliberalist forays – go largely uncontested (at least in the public sphere). In Qatar, such forays are being actively experimented with in an effort to realise the nation’s aspirations. Yet, whether or not the entire Qatari population shares this vision is difficult to surmise because Qatari nationals are reluctant to openly critique their government. Certainly, it would be reasonable to infer that improvements associated with the provision of education and health care are broadly regarded as beneficial. However, it is also important to acknowledge the obvious bias that my data contains inasmuch as my Qatari informants are specifically those who are involved in technologies of self-enterprise, actively pursuing tertiary education and contributing to the nation’s neoliberal agenda.

I turn now to focus specifically on the active, interventionist facets of neoliberalism within the Qatari context, “where *neoliberalism as exception* articulates sovereign rule and regimes of citizenship” (Ong 2006: 3). In Qatar, neoliberalism is being introduced to a “[site] of transformation where market-driven calculations are being introduced in the management of [the population] and the administration of special spaces” (Ong 2006: 3-4). What is of particular interest to me at this juncture are both the recruitment implications and the role that the adoption of American tertiary educational models play in producing citizens best suited to achieve Qatar’s modernist agenda and goals for development. I shall discuss how “logics of exception”⁵⁴ are deployed in the zoning of Education City and how these function as mechanisms to create an environment conducive to the advancement of knowledge and the enhancement of individuals. I will also examine how adjustments to established modes of practice relating to sovereignty and notions of citizenship within this arena are implemented in an effort to improve the calibre of the nation’s workforce.

According to Ong, “neoliberalism as a technology of governing relies on calculative choices and techniques in the domains of citizenship and governing” (2006: 4). She goes on to explain that it is also a form of governmentality⁵⁵ that is conducive to robust and centralised states, utilising as it does, “market knowledge and calculations for a politics of subjection and subject-making” (Ong 2006: 13). The Qatar government’s modernisation project involved a number of calculative choices regarding the strategies employed to meet this goal. Amongst Qatar’s carefully considered choices were its *modus operandi* and the controversial decision to align

⁵⁴ The state of “exception” is a widely explored concept, especially in juridical and political theory.

⁵⁵ The concept of governmentality is attributed to Michel Foucault and refers to the manner (e.g. rationales, techniques) in which governments attempt to create citizens best suited to achieve governmental policies.

itself with American universities during a period marked by heightened political tension.⁵⁶

This last point warrants expansion. It is only certain types of education that are currently considered beneficial in globalisation rhetoric and the ideology of neoliberalism. What constitutes “knowledge” in knowledge-based societies includes specific types of knowledge and not others. There is a perceptible hierarchy of knowledge. For instance, religious and moral education such as learning to recite the Quran in a madrasa, or the study of Confucian morality and statecraft that was considered essential to the good society in imperial China, are now relegated in favour of technical and scientific education. Like many developing countries, when it comes to tertiary education, Gulf Arabs have a propensity towards science and technical degrees that lead to specific professions rather than the humanities and liberal arts degrees that are so common in North America.⁵⁷ In the neoliberal era, liberal arts programmes are called into question because they do not provide specific job training and are trivialised on the basis that they are perceived to have little substantive market value. Science, technology, law and business are the neoliberal knowledge-economy disciplines par excellence, whereas humanities are too obviously value-laden and culturally embedded to go global in the same way. For many Arabs, a degree tends to be taken as a means to an end, rather than as an opportunity to extend one's learning for the sake of it, which is exactly what neoliberalists want education to be. Most Arabs who pursue American degrees do so

⁵⁶ When the NY medical college opened its doors to its permanent building in Qatar on 7 September 2002, it was hailed by many as an important diplomatic initiative. This was no understatement considering that WCMC-Q's inauguration occurred almost a year to the day after the events of 9/11 and that it coincided with military preparations for the US invasion of Iraq. On the occasion, HH referred to the establishment of the college as “a model of cooperation and an example of healthy globalisation”, while the then presiding President of Cornell, Hunter Rawlings declared its establishment to be an example of “educational diplomacy at its finest”. In addition to the war in Iraq, Education City has continued to successfully recruit US universities during a temporal backdrop that includes the “Global War on Terror” against Al-Qaeda and amidst revelations that former president George W. Bush had considered bombing the Doha headquarters of the Arab news agency Al Jazeera. Subsequent to these events, fewer Middle Eastern students have elected to study in the US. Their reluctance to study at American institutions reflects both a tightening of US visa restrictions and concerns for personal safety in an environment that may be perceived to be hostile to Arabs.

⁵⁷ To date, it is not possible to obtain a liberal arts degree in Education City. The absence of such a programme could be regarded as evidence that the globalisation of tertiary education is resulting in the decline of the humanities (Miyoshi 2002).

in order to obtain international credentials that tend to culminate in professional designations, thus making themselves more competitive within the domestic job market. This preoccupation with career-driven education is reflected in the new availability of degree-granting institutions in Qatar that lead to vocations in the fields of business, engineering, media and medicine.

This centring of education is consistent with the strategic vision set out by the Arab Human Development Report (UNDP 2003) that recommends a form of societal transition wherein knowledge is recognised as a source of value and becomes an “organising principle of human activity” (Fergany 2006: 34). Qatar’s recent use of neoliberal technologies is in effect a, “mode of governing that centers on the capacity and potential of individuals and the population as living resources that may be harnessed and managed by [the] governing [regime]” (Ong 2006: 6). Thus, the introduction of structural reforms in Qatari education at all levels is designed to equip the population with new skills and is generating new knowledgeable citizen-subjects.

Ultimately, Qatar’s participation in collaborative educational ventures is resulting in the production of “...new practices of government that are also redefining who counts as a worthy citizen. In other words, the kind of subject positions that are deemed worthy managers and workers are becoming increasingly similar to the kinds of subject positions that define the worth of the citizenry” (Olds and Thrift 2005b: 271). The state’s current agenda entails a “recoding of citizenship” whereby the current generation is being equipped with specific linguistic, technical and cognitive skills required to function in the global economy. Central to all of this has been “persuading the population to become its own prime asset – a kind of people mine of reflexive knowledgeability” (Olds and Thrift 2005b: 272). With time, it is hoped that Qataris will be cultivated as domestic experts and eventually come to replace foreign expertise in specific sectors. Until such a time, however, Qatar will be forced to rely on the know-how of outsiders.

Citizenry

Paralleling Singapore, Qatar's ambitious quest to become one of the world's most developed knowledge-based societies represents an experiment in modernity "driven by the relentless pursuit of new ideas, the manipulation of human resources, and recoding of the purpose of the city-state" (Ong 2005: 343). Thus, there exists a strong correlation between the need to construct new-citizen subjects and structural reforms (Olds 2007). The two are mutually constituted as neoliberal reforms require active citizenship. In addition to the specific needs of the labour market, changes to the provision of education also reflect a deliberate attempt to mould the nation's citizenry. Commencing in the 1970s, Qataris pursuing tertiary education had the option of studying domestically or abroad for programmes unavailable locally. Previously, students were eligible for state-funded scholarships irrespective of the field of study or their relevance to national development priorities. The scholarship system was "neither consistently designed nor consistently executed, resulting in few incentives for scholarship recipients to attend institutions that were appropriate for their and their country's needs" (Augustine and Krop 2008). However, the establishment of Education City and restrictions on scholarship funding favouring *in situ* institutions, have not only reversed the mass exodus of Qatari students from studying abroad, but also provided incentives for nationals to pursue fields of study in alignment with societal needs. WCMC-Q is mandatory for citizens wishing to study medicine and be eligible for state funding. Qatari students do not have the option of attending an alternative medical college unless they are prepared to self-fund the degree. This funding incentive seems to have deterred Qataris from attending Arabic-medium medical schools in the region.

The availability of new opportunities for skills acquisition is prompting a shift in the social contract, whereby the Qatari government no longer assumes sole responsibility for the care of its population, but instead, advocates mutual responsibility through the provision of support for its citizens who are expected to take action to improve themselves. For instance, the state bestows additional benefits on self-reengineering

citizens who pursue and complete tertiary education (e.g. larger interest-free mortgages). Thus, nationals are “induced to self-manage according to market principles of discipline, efficiency, and competitiveness” (Ong 2006: 4). Active citizenship is now the order of the day. In this emerging scenario, actors who do not acquire academic capital may come to be considered less valuable to the state and potentially subject to exclusionary practices.

Qatari logistics

Notwithstanding the government’s concerted effort to invoke a series of protective measures or positive types of exceptions enabling privileged groups to tackle the challenges of globalisation,⁵⁸ the diminutive Qatari population means that at any given time there exists only a narrow segment of society that might be enticed to take advantage of the new opportunities afforded by the new educational initiatives (e.g. age, educational prerequisites). The labour shortage is further compounded by the fact that up until recently, individuals could secure employment irrespective of their academic credentials. There exists an:

...implicit social contract [guaranteeing] Qataris employment in the government sector, which employs about 77 percent of all Qataris in the workforce. Qataris favor work in government jobs, which provide them with high salaries and good benefits, short working hours, job security, and little competition from expatriates better qualified than they are (Stasz 2006: 2; Planning Council 2002, 2005).

In other words, there are few incentives motivating Qataris to take advantage of the opportunities being opened up in the burgeoning post-secondary system. The paucity of Qatari students recruited into the programmes is falling far short of the number required to improve the workforce (particularly in the field of medicine). Thus, the scope of citizenship seems to be gradually expanding in order to include certain categories of people who hitherto were not normally classified as citizens, expanding

⁵⁸ Take for example, funding and quota stipulations in effect at universities in Education City that give preferential treatment to Qatari applicants. QF’s mandatory quota system represents an example of a positive “exception” to the institutional autonomy granted to the resident universities.

numbers while entitling them to certain benefits (namely education, access to scholarships, a Qatari passport).

Most notable is a shift from agnatic to bilateral kinship recognition in the defining of citizenship. Previously, the Qatari Nationality Act only recognised children of Qatari fathers as citizens.⁵⁹ Presently, however, people can claim citizenship if they have a Qatari mother,⁶⁰ or are eligible to apply if they meet the following criteria: have been resident in Qatar for a period of fifteen years, speak Arabic and possess no criminal record. It seems the Qatari government is forging new openings to give non-Qatari Arab residents citizenship in order to extend their pool of domestic talent. It is noteworthy too, that the exceptions being made to citizenship criteria seem geared specifically to apply to GCC Arab residents who are broadly ethnically and culturally indistinguishable from the Qatari community. The inclusion of individuals who share cultural commonalities (e.g. linguistic, religious, ethnicity) helps to camouflage their incorporation into the ranks of Qatari society and reduces the risk of offending anyone's sensibilities. During my fieldwork, one medical student was conferred Qatari citizenship and as a bona fide national became eligible for full university funding. While this number may seem insignificant, reclassification of this student's citizenship status effectively doubled the intake of Qatari nationals to the Medical Program that academic year and increased the number of Qataris attending/attended WCMC-Q to a sum total of seventeen since the programme's inception. In the 2005-2006 academic year, although roughly half of the students enrolled at universities in Education City were Qatari, only ten percent of the nationals attended WCMC-Q (Stasz et al. 2007: 68). To sum up, new gradations of includable actors are being devised.

⁵⁹ Consistent with the fact that citizenry has largely been determined patrilineally, Qatari females tend to express a preference to marry Qatari males. For a discussion of issues students take into consideration with regard to undertaking residency programmes at home or abroad, see Chapter 5.

⁶⁰ Before this formal expansion of citizenship, some academic funding was available to these students through a programme known as "Scholarships for Children of Female Qatari Nationals". Although no official statistics are available, a QF informant who deals with scholarships estimates that these students now account for two percent of all "Qatari" students attending university in Education City.

The definition of citizenship may be further broadened to render still more people classifiable as Qatari nationals. During my interview with HH, she suggested that the government might consider conferring limited citizenship upon medical school graduates in a bid to retain their essential skills. This would require an individual to practise as a physician in Qatar for a period of five years or more. Though limited in scope, the potential extension of citizenship to non-nationals would represent a new citizenship regime geared toward the inclusion of individuals deemed to effectively contribute to the emerging knowledge-based society.

The provision of scholarships and financial support is another important mechanism used to target specialities and to address particular societal and economic needs. Financial aid is available to all students who can demonstrate need, regardless of nationality. The Khalifa Financial Aid Program is available to any student who demonstrates financial need, and/or is the child of a long-serving expatriate or who has provided exceptional service to Qatar. But it became apparent during my interviews with students that measures were going to have to be put in place in order to entice non-Arabic and non-citizen students back to Qatar following their residencies in the US. Interestingly, unlike many of their peers educated in Arabic-medium schools, few of the males educated in community or independent schools (i.e. those in possession of an International Baccalaureate) are contemplating the prospect of returning to the region because of better research opportunities and the financial benefits of working privately in the American health care system.

As part of a strategy to prevent “brain drain” and in order to retain the talent that has been nurtured in Education City, a number of incentives are in the process of being implemented. For instance, university graduates who opt to participate in a paid service programme related to the development objectives of Qatar can reduce a year of student loan debt for each year of employment in the country (QF 2007). Keen to protect the status quo, the preservation of its cultural values and high standard of living, the Qatari government usually precludes foreigners from becoming permanent

members of their society so these citizenship amendments are novel.⁶¹ Should such exceptions be enacted, they will contravene normal conventions and represent a “decision to include selected populations and spaces as targets of ‘calculative choices and value-orientation’” (Ong 2006: 5). Though, it seems certain that the health care domain will continue to bring into sharp relief some of the calculative decisions that Qatari leadership will face in the future.

The expansion of American universities

In addition to redefining the social criteria connected to citizenship, the Qatari government is also fashioning new spaces geared to meet the demands and consequences of their rapidly transforming economy. In chapter two, I noted that while there exists a plethora of global business schools, Cornell’s transnational medical college represents the first of its kind. Ong contends that the propagation of American business programmes engenders new kinds of actors who are equipped for employment in knowledge-driven sectors and that the academic curriculum “is clearly designed to promote a set of American market values, thus shaping the constitution of a particular kind of educated and enterprising subject who works in global cities, that is, a neoliberal anthropos” (2006: 148). The neoliberal anthropos being an actor trained specifically for employment in knowledge-driven economies. If this is correct, it means that the growth of professional programmes specialising in business has arisen in order to train potential global colleagues to assume an American business habitus, thereby paving the way for future collaborations and the generation of more capital. Thus, transnational corporate institutions have succeeded in producing a homogenous “global circuit of business culture” by supplanting foreign modes of business practice and management values via the introduction of American models of business education (Ong 2006: 148; Olds and Thrift 2005).

⁶¹ An employee’s longstanding service to a company is occasionally rewarded with a residence permit of indefinite duration, sponsored by the employer. In exceptional circumstances, citizenship has been granted to individuals deemed valuable to the country for outstanding service to the state (e.g. footballers, artists, a Christian Lebanese lawyer). Naturalised citizens are not entitled to the same financial benefits as native Qataris.

In the case of medicine, Western medical education and techniques are encroaching into medical schools, hospitals and clinics around the world (e.g. through overseas electives, borrowing of foreign curricula). Some scholars see these developments as a type of imperialism (Bleakley et al. 2008; Holt and Adams 1987). In short, transnational universities may be regarded as “a vehicle for the imposition of Western modes of reason [and practice] (often suspected in turn of being no more than Western economic reason at that)” (Barnett 2005: 785), whereby the globalising tertiary education sector is branded as a new form of colonialism.

Certainly, the ubiquity of American business schools attests to the participating universities’ confidence in the global applicability of their curricula. Yet, in spite of widespread belief in the universality of biomedicine and the fact that global access to US medical programmes would promulgate Western models and standards of professional health care practice, the relative absence of internationalised American medical schools is curious. Unlike the business world, the medical sphere does not seem to be striving to produce a rank of global health practitioners capable of providing uniform standards of health care the world over via the introduction of transnational collaborative ventures.

There are a number of factors preventing medical schools from becoming involved in transnational ventures. Clearly, the nature and specific requirements of medical education involve an entirely different set of logistical considerations (e.g. length of programme, technological infrastructure, prohibitive start up costs, integration into local health care setting, licensing and accreditation) when compared to business programmes. Of these, the three most significant impediments contributing to the lag in the globalisation of medical education are: disparate resources, diversity of cultural contexts, and the absence of globally accepted international standards of medical education (Wojtczak and Schwarz 1999).

In other domains such as the environment, construction, aviation, communication and commerce, globally accepted international standards exist. Such ratified agreements "...are opening doors to global mobility and encouraging the development of common educational standards, mutual recognition, and the liberalization of processes by which professionals are allowed to practice" (Wojtczak and Schwarz 1999). Mutual agreements outline shared protocols, streamline processes, facilitate smooth global transactions and assure portability of qualifications, expectations and standards. Yet, the World Federation for Medical Education (WFME) has only recently put forth a document outlining basic standards for medical school curricula and performance standards (WFME 2003).

Medical school accreditation standards exist at some national and regional levels (e.g. National Board of Medical Examiners in the US; General Medical Council in the UK; Panamerican Federation of Associations of Medical Schools) but not at the international level. While the WFME endorses international medical guidelines, the organisation is reluctant to formulate a system of global assessment and accreditation of medical colleges owing to the variations in teaching traditions, spectrum of diseases, socio-cultural conditions and different health care delivery systems (WFME 2003). Currently, the knowledge, concepts and principles covered in medical school curricula vary the world over. Until the global medical community produces a definitive document outlining assessment of requisite universal competencies with regard to clinical knowledge and skills, professional conduct, ethics and values, the notion of a global medical professional (anthropos) will remain an indeterminate concept.

Educational zoning

The "global city" is a zone of exception that states can use as a tool to connect their economies and citizens to global flows. In that sense it is a global assemblage as it brings into play the shifting nexuses and negotiations over institutions, ethics and

technologies that are taken as comprising the “becoming” of an assemblage. Qatar is using zoning technology to create a distinctive educational enclave that supports an enticing matrix of social, political, economic and technological conditions conducive to recruiting international universities and foreign expertise. These calculative neoliberal arrangements are essential to the procurement of transnational academic networks involving the mobilisation of knowledge, actors and resources.

Several calculative mechanisms code Education City as a special academic zone of exception, a discrete space wherein the application of normative practices is suspended. Amongst these markers are: institutional exemptions from taxation, incentive schemes (premises, state of the art infrastructure), foreign ownership, freedom to hire expatriate employees (exempt from Qatarization employment quotas), uncensored Internet access and written guarantees ensuring academic freedom and autonomy.

The recoding of territory combined with the implementation of the aforementioned mechanisms cultivates a space and set of conditions “radically at odds with those in the rest of the country”, better positioning the state of Qatar to engage in both the global circuit of academia and financial markets (Ong 2006: 19). Nor are these exceptions confined to governance and fiscal arrangements but rather extend to social norms as well. Education City is best conceived of as an enclave where students are at liberty to contravene long-standing social norms during the course of their academic studies. These transgressions are addressed more thoroughly in Chapters 6 and 7.

Education City is administered differently from other sites in Doha, in that the government “disaggregate[s] different components of power...and [gives] up certain controls for the governance of overlapping national spaces [transnational university campuses]” (Ong 2006: 102). Thus, we see inside Education City a situation in which Qatari and foreign sovereignties intersect, an arrangement which supports Sassen’s argument that globalising processes are resulting in “a partial

denationalization of national territory and a partial shift of some components of state sovereignty to other institutions” (1996: xii). To be sure, the use of zoning strategies is not restricted solely to the domain of education, but is also in evidence throughout the national landscape (predominantly in the vicinity of Doha). For instance, the cultural zoning of sports venues, heritage areas, residential properties for expatriate workers (Dresch 2006: 10), and economic zones such as that found in the form of the Qatar Financial Centre represent bounded spaces wherein differential scales of regulation and transference of power are in effect. Like Abu Dhabi, Qatar’s prolific use of zoning and its discernible application of “variegated sovereignty” renders spaces immediately identifiable as predominantly national or foreign (Dresch 2006: 205).

Ong (2006) argues that states introduce new templates of graduated sovereignty and zoning technologies as a means of coping with the conditions associated with globalisation. She explains her conceptualisation of “graduated” or “variegated sovereignty” below:

I use the term *graduated sovereignty* (her emphasis) to refer to the effects of a flexible management of sovereignty, as governments adjust political space to the dictates of global capital, giving corporations an indirect power over the political conditions of citizens in zones that are differently articulated to global production...In short, “graduated sovereignty” is an effect of states moving from being administrators of watertight national entity to regulators of diverse spaces and populations that link with global markets” (2006: 78).

If we substitute the term “universities” for corporations, and “academics” for politics, her concept of variegated sovereignty can be applied fruitfully to the context of Education City where WCMC-Q is embedded.

While Ong’s theories find grounding in the Arabian Gulf, it would be remiss if I did not underscore the contextual differences between our respective fieldwork settings. Although the “state” in Qatar and several East and Southeast Asian countries can be characterised as both centralised and robust, the *nature* of the state differs greatly. To

begin with, under the current Qatari regime there is a kind of unwritten paternalist or patrimonial contract at play. Qatar is what is commonly referred to as a rentier state. As such, it is not overly concerned with profiting from these global flows of capital as much as cautiously managing its relationship with these flows whilst retaining its cultural identity (Gardner 2009, pers. comm.). This is achieved through a variety of zoning technologies that include not only parallels to the economic zoning found in East and Southeast Asia, but also cultural, residential and educational zones. However, two issues bear mention. First, Ong's notion of zoning is confined principally to political and economic spheres. While that form of enclaving is evident in the Gulf in its free trade zones, we also see the demarcations of zones for cultural purposes. Put simply, the zoning used in the Gulf seems to correspond to the preservation of culture as much as (or perhaps more than) it does political power and the accumulation of wealth. Second, Ong's ideas of graduated sovereignty and zoning technologies apply to Asia and its already well-established markets. Qatar on the other hand is an emergent nation, grappling with global economic flows. While the affluent state is channelling a substantial portion of its wealth into transnational ventures in order to tap into certain global conduits, as a developing nation, Qatar is concerned primarily with developing its domestic citizenry and infrastructure, upon which its global integration is contingent.

When adopting certain neoliberal concepts piecemeal for specific calculative purposes, it is essential to ensure that these exceptions are readily identified as such and are contained within strict boundaries. So as not to dilute state power, graduated sovereignty is only introduced into explicitly demarcated spaces of exemption wherein "sovereign states can create or accommodate islands [pockets] of distinct governing regimes within the broader landscape of normalized rule" (Ong 2006: 103). In essence, these definitive spaces become proverbial exceptions rather than the rule. If you want to create such an exception without impinging on the rule, the exception has to be tightly framed. Activities that are congruent with global markets, but perhaps less so within the national space, are thus shielded in a zone of graduated sovereignty like Education City. This hiding away also helps to mollify the more

conservative groups. Here practices administered by foreign institutions can be recalibrated as non-political and non-ideological technological solutions to Qatar's development needs. This "marking off from the normativity established elsewhere" is especially important in a strictly Islamic community where the framing of the exceptional ensures that these activities do not become normative modes of practice and prevents them from becoming part of the overall structure of the society by default (Ong 2006: 104). Thus the creation of zones results in two distinct spaces: inside – which is marked by a degree of orientation towards the west; and outside – a space wherein Islamic ideals are preserved and the Muslim community is protected.

These zones of exception almost seem to find a parallel in the biological metaphor of immunosuppression: how at once to implant and to quarantine a potent foreign body. "Exception" in this context is equivalent to deliberately induced "suppression" of the immune system in order to prevent the body from rejecting an organ transplant.

Immunosuppressants allow the body and the foreign organ to form a new relationship and create new sites of corporeal compatibility in which "difference is selectively suppressed, allowing specific subpopulations to become 'same enough' for their members to be surgically disaggregated and their parts reincorporated" (Cohen 2002: 18). In other words, suppression curbs the body's capacity to differentiate between self and non-self, thus helping to moderate the recipient's response to the foreign body part by making it seem compatible.

Perhaps more poignant still, is that the concept of immunity is originally derived from socio-political discourse (e.g. diplomatic immunity) and not biology. In Latin, the words "*immunitas* and *immunis*" have their origin in the legal concept of an exemption" (Silverstein 1989: 1). Inside the confines of Education City an attempt has been made to create institutional spaces wherein dissonance between personal obligations, morals and notions of personhood and system requirements (of the state) can be negotiated. Thus, certain normative practices, expectations and customs are overlooked within the tolerant setting.

Within the clearly demarcated grounds of Education City, a condition of exception is in effect, reducing the role of Qatari leadership to that of an administrator, responsible for service operations and facilities maintenance (i.e. security, catering, cleaning) of the educational buildings. All other activities occurring inside the academic facilities are under the jurisdiction of the academic institution (e.g. procurement, hiring, admissions, curricular content, pedagogy and quality assurance), which operates based on extraterritorial norms of practice. For instance, the building that Cornell occupies in Qatar was constructed in accordance with the NYC Building Code⁶² and functions according to Environmental Health and Safety guidelines as set out in the metropole. The college's policies and procedures adhere to NY law and best practice; even the cadavers originate from the metropole. Despite its Middle East location, the college abides by the policies and procedures set out by the federal agency known as the US Food and Drug Administration. Similarly, as members of the WCMC medical community, staff and students adhere to standards pertaining to the use of all protected health information as codified in US law established under The Health Insurance Portability and Accountability Act. Put simply, "WCMC-Q is an American institution, therefore we abide by American law" explains one dean. This includes for example, adherence to the Family Educational Rights and Privacy Act in order to protect student confidentiality. Thus, the university will not disclose personal identifiable information from the educational records of a student without prior written consent of the student.⁶³ Suffice to say, everything that they do or have in NY is either transplanted directly or cloned on the Qatari campus.

Yielding restricted power puts the Qatari government in an unusual state of political liminality having made the "extraordinary decision to depart from a generalized political normativity" by entering into shared partnerships with the American tertiary institutions (Ong 2006: 5). This is a genuine example of sovereignty being manifest

⁶² Qatar only introduced an official building code in June 2007. It is based on an amalgamation of British and US construction standards.

⁶³ Some students mentioned that in the beginning they regarded this restricted parental access to their records as a culture clash because it contravened notions of familial openness.

in a variety of modes and at times in contradictory ways. Inasmuch as the flexible form of governance operating within this particular zone may be perceived as fragmenting domestic sovereignty, it may also be regarded as expanding the “space of the nation state” (Ong 2006: 7). In other words, Qatar is extending its global reach by embarking on transnational collaborative ventures beyond its national borders.

Autonomous universities

As academic institutions contemplate embarking on new global ventures, “new types of uncalculability emerge” (Giddens 1994: 26). For instance, institutions seeking to deliver their programmes abroad are exposed to new risks and are confronted with unanticipated challenges in the new settings. Alluded to earlier, but only here thoroughly explored is the idea that in order to lure “world class” universities like WCMC to Qatar, it has been necessary for the Qatari state to concretise a series of economic incentives and governance frameworks to make the collaboration more enticing to foreign institutions and to ease their fear of incalculable risks. In order to minimise the risk of compromising the institutional brand and academic standards, Cornell (and subsequent universities) for instance, needed a guarantee that it would possess the necessary autonomy to administer its programme as it does on the original campus *without* interference from external parties (e.g. *wasta*-bearing individuals, Qatari government). Within the confines of Education City, uniform sovereignty had to be abandoned and replaced with an assemblage of administrative strategies owing to the diverse interests and requirements of all the participating institutions.

Inside Education City, state power is voluntarily rescinded or scaled back in order to accommodate new forms of shared administrative control with the foreign universities. Like the specially designated economic spaces carved out in South and Southeast Asia, the Qatari government wields official sovereignty in the educational zone but the universities and other foreign agencies “exert *de facto* control” (Ong

2006: 19).⁶⁴ This need for autonomy and control was of paramount importance to Cornell. A WCMC administrator's explanation of differences between QF's initial relationship with Virginia Commonwealth University and its own arrangement is insightful:

They [VCU] were just a management entity and I wouldn't encourage any university to get into that sort of relationship where you become managers and don't have control. You need total autonomy, especially if you show a degree of course! Your trustees wouldn't allow it any other way.

Cornell insisted on maintaining its corporate independence because failure to retain total autonomy over its programme would have been a veritable deal-breaker during early negotiations. Yet, institutional autonomy represents only one of the calculable risks that needed to be addressed before Western universities were willing to commit.

Academic liberties

In the QF President's quotation cited above, he spoke of fostering the "right kind of liberal environment" in order to attract foreign institutions. Most American universities uphold a commitment to diversity and endorse freedoms of religion, opinion, expression, association and academic freedom. The promotion of these values is considered essential to fostering academic environments open to critical inquiry and the cultivation of knowledge, particularly in science. Although some traditionalists may have considered such academic settings to be at variance with local conditions, QF formally declared its intention to honour such values in its written documents and contracts (e.g. Memorandums of Understanding). This assurance of authoritative scope was crucial to negotiations with prospective institutions and ultimately resulted in Qatar establishing a specific educational area

⁶⁴ The remainder of Ong's quote goes on to specify "...over the conditions of living, labouring, and migration of populations in special zones". This differs slightly from Education City, however, as many issues related to housing, immigration and the employment of menial labour (i.e. cleaners, catering, construction) overlap, or are deferred entirely to QF.

wherein the state relinquished certain facets of its sovereignty in order to foster the appropriate conditions for transnational academic collaborations.

Exercising a policy of “neoliberalism as exception” inside Education City has afforded the nation an opportunity to formulate partnerships with foreign institutions (e.g. WCMC-Q shares centralised connections to official bodies via the NY campus, including affiliations with JCI, LCME and the AAMC). In linking the state to global academic and medical circuits, some of the actors who were educated in Arabic-medium schools have encountered new regulations, practices, expectations and values previously unknown in their Qatari public sphere (e.g. autonomy and relatively unrestricted movement of unchaperoned females; coeducation of the sexes). Hence, while Qatar engages with an external globalising world, some citizens (and regional actors) initially find this interaction somewhat disconcerting.⁶⁵ Ong documents a similar situation in East and Southeast Asia where:

Neoliberal forms...are often in tension with local cultural sensibilities and national identity. While technocrats embrace business agendas and legitimate ideals of human talent and self-enterprise, many ordinary people remain ambivalent and skeptical about market criteria and its assault on collective values and community interest (Ong 2006: 12).

Practices associated with neoliberal exception occasionally engender new arrangements that deviate from accepted modes of practice or local traditions. This can be attributed to the fact that although procedures associated with the domains of medicine, business and science are “highly mobile, their transmission, translation, and implementation in diverse zones are always situated” (Ong 2006: 21). As a site of incongruous activities, the conjunctural and ambiguous nature of Education City requires its actors to have a certain degree of openness. My arrival in Doha coincided with an early phase in the evolution of Education City when the transnational venture was little understood by the intended beneficiaries, the Qataris themselves. As a result, ambivalence, scepticism and miscommunication were rife in

⁶⁵ Dresch refers to a parallel situation in Abu Dhabi (2006: 213).

the Qatari community. With a long tradition of segregation of the sexes, the introduction of coeducation within the American colleges in particular seemed to cause a stir among conservative Muslim circles. How immersion in this academic environment is experienced at a personal level is examined in Chapter 6. For many individuals at this particular time, the single-gender and Arabic-speaking environment at Qatar University was more in keeping with core Qatari values and culture. Despite attending Cornell himself, one male nearing graduation said, “It’s alright for me but I wouldn’t want my sister to attend here. I wouldn’t want to marry a girl from Education City”. Another younger, particularly devout Muslim male echoed this saying that he “[thinks] the coeducational environment is not right. If my sister or daughter wanted to study medicine, I would prefer that she go to Saudi [where there is a female-only medical college] instead. She’d be more comfortable there”. It is telling that during the 2005-2006 academic year, 91 percent of the students enrolled in four-year post-secondary institutions in Qatar opted to attend the national university (Stasz et al. 2007: 67).

Accessed as it is via three secure gates, the fortress of Education City is segregated from the surrounding landscape and from actors that are excluded (either by choice or through failure to gain acceptance into one of the educational programmes) from the activities that occur inside the grounds. Within this compound greater freedoms abound, both at individual and institutional levels. These liberties “are a prerequisite for creating an environment conducive not only to the creation of knowledge, but also the starting conditions for a profound reform of governance” (Fergany 2006: 33). Moreover, these freedoms are very much in evidence at Cornell, in the sense that the student doctors I interviewed admitted to doing all sorts of things on the side of the Education City threshold that they would never “normally” do outside that zone (e.g. socialising with the opposite sex, conversing in English, cutting up bodies, garnering a comprehensive understanding of taboo issues such as alcohol and sex). Nevertheless, the performance of virtue and adherence to normative values and

Islamic ethics within the educational domain remained paramount for Qatari students.⁶⁶

As a zone of exception, Education City provides a space in which the overarching neoliberal policies of the Qatar ruling class and variances such as those mentioned above can productively co-exist. The introduction of a coeducational space was novel considering that most public spaces in Qatar are typically gendered social spaces (with the exception of communal shopping malls, cinemas, hotels and independent schools). For instance, the majlis, Qatar University, hospitals, restaurants and parks have specific entrances, designated days and/or areas for “women” or “family only”. Such disciplining of social space not only limits interaction between sexes, but also prohibits the high density of unaccompanied male foreigners from congregating in these venues. The shopping centres in Doha also have prominently displayed multilingual signs making explicit acceptable



Figure 7. Interior view of North hall. Photo: Martin Marion
behavioural codes of conduct within the public place.

⁶⁶ For a discussion of medical student self care strategies used to ensure their reputations remain intact whilst undertaking their degrees, see Chapter 6.

In many ways Education City's isolated position and Cornell's restricted access affords a safe place for experimentation with coeducational exchanges, close interaction with Americans, and the proliferation of liberal pedagogical practices that might not be easily tolerated in the broader community. Overall, the partitioning of parcels of land for specific purposes appears to be a useful "mechanism for creating controlled spaces of...experimentation that do not threaten collective and national security" (Ong 2006: 113).⁶⁷ Perhaps more importantly, however, is that the educational compound's location reflects a deliberate attempt to appease the more conservative sensibilities of certain facets of the domestic population. Reluctant to be perceived as undermining traditional values, controlled access⁶⁸ into Education City means that it functions as a relatively safe place where the Qatari government can trial modernisation strategies. Purposely stationed on the outskirts of Doha (with plenty of room for expansion), few people encounter the educational complex without due purpose. Contravening Ong's suggestion that zoning strategies are designed to "capitalize on specific locational advantages of economic flows, activities and linkages" (2006: 103), Education City's secluded positioning

⁶⁷ Asymmetrical citizenship conditions are at play in Qatar. Despite Education City operating as a neoliberal zone of exception, there are many examples of individuals who are, themselves, classified as exceptions marking them as excludable both physically and politically. For instance, ethnic and cultural exclusionary citizenship practices also apply to the host of people working at WCMC-Q. These excludable populations include the high-skilled, mobile expatriate teaching staff, as well as the low-skilled migrant workers who work behind the scenes such as drivers, security guards, construction workers, cleaners and food service staff. Though both categories are indispensable to the operation of the institution, the latter are conferred fewer rights and subject to harsher living conditions.

⁶⁸ Security guards and CCTV footage are used to monitor all the entrances to the campus, college buildings and residences.

accommodates *laissez-faire* conditions and shields the academic institutions from any social discontent that their presence or activities may provoke.⁶⁹

Is “flexible citizenship” at play?

Ong suggests that new outposts of US universities in South and Southeast Asia serve as examples of tertiary education intersecting with “the strategies of overseas elites, who seek to accumulate world-class degrees that will open doors to international careers” (Ong 2006: 140). However, Ong’s theory of flexible citizenship finds little traction in Qatar, where for instance the transnational medical degree functions as a means to a different end. While her observation that tertiary education is primarily an elite endeavour has parallels the world over, the degree functioning as a veritable passport to a career located *elsewhere* does not correspond to all the students attending WCMC-Q. Contravening Ong’s cynical pronouncements of education being undertaken solely for self-serving reasons, few of the Arabic-educated students are undertaking the foreign degree in order to pursue life in America. Although having the option to study abroad, several students are opting to pursue their medical residencies in Qatar (Appendix M). Most of the Arab informants (Qataris and non-Qataris) were explicit in their intentions of not pursuing international careers. Rather, they are concerned with obtaining global standards of expertise in the field of medicine with the intention of returning and contributing positively to the development agendas of their respective home countries. Despite engaging in calculative and self-enterprising forms of neoliberal conduct, many of the medical

⁶⁹ Allegedly, two bomb threats occurred in Education City during my fieldwork. Though unsubstantiated in the local press, within a day of the first rumours our student dormitory windows were “bomb-proofed” with a special plastic coating to prevent shattered glass from harming occupants in the event of a bomb and heightened security measures were imposed at the entrances (e.g. using mirrors to check car undercarriages, car boot checks). The second alleged threat occurred in the Texas A&M building on the lead up to a high profile visit from George Bush Sr. As part of its campus preparedness for emergencies, WCMC’s website includes a page outlining the procedures to be followed in the event of a bomb threat. In addition, during WCMC-Q inductions, students and staff are issued with a safety-training booklet which advises them to have a “grab bag” (containing one’s passport and documents) located close to their door. These policies, delivered directly from NYC provide some insight into the institutional response to the events of 9/11. Though motives were never made explicit, that the campus constitutes a soft target suggests that not everyone is content with the Education City arrangements.

students are equally inspired by patriotic concern for the welfare of their nation states.

In addition to individual professional aspirations, altruism plays a significant motivating factor in some students' decisions to become physicians. Many doctors-in-training (Qataris, Iraqis and Palestinians in particular) speak about their desires and/or obligations to help improve and contribute to their respective nation's provision of health care. One particularly liberal Qatari female explains:

I am proud of what my country has achieved so far. The main reason I would go to the States to do my residency training there is because I want to add something here.

In this case, the student is of the opinion that a medical residency in the US will further equip her with the skills needed to transform her domestic health care system. During the interview she acknowledged that the time away from her family would no doubt prove difficult but that ultimately, her short-term stint in the US will be to the benefit of the nation.

Here, a Qatari student explains his rationale:

"I am studying medicine at Cornell so that I can improve the quality of medicine here in my home country."

A fourth year Qatari echoes this:

"I hope to have a positive influence on the local health care system."

Unlike medical professionalism in the West where occupational competence is a measure of neoliberal factors such as "efficiency, individual merit, functional specificity, and career continuity", in Saudi Arabia one is appraised on "criteria of social responsibility and the display of appropriate respect, deference, and authority...[with] regard for personal demeanor and accepted form" (Gallagher and

Searle 1984: 215). Social responsibility also seems to be an important determinant in Qatari students' altruistic decisions regarding the field of medicine they intend to specialise in:

I want to practise in Doha, so I will take the statistics of the hospital and see where's deficient. For example, if they have a deficiency in neurosurgery and they need more neurosurgeons I'll do it if I can do it well. I can help my country to increase from three [surgeons] and I can be number four, doing an additional ten surgeries per week for the hospital. This is what I should be thinking about, I shouldn't be thinking about, "Oh, I want to be a neurosurgeon because it's just cool and I can make lots of money"... When I make my decision of what I want to be, I want to make it depending on my life and depending on my society.

Another cites her indebtedness and responsibilities to the State of Qatar:

I have responsibilities, especially in Qatar. I mean my government helped me get this education, so I really owe them, definitely. Not in terms of money-wise, I mean in terms of moral-wise. That is why I specifically chose OB/GYN. OB/GYN is big in Qatar, you know our load is huge in term of women, pregnancies and deliveries and so on. So I really wish to have a great role in that. And especially that we're having a new hospital that I wish to be involved in it. Yeah, to set the basis so that even after I die they keep saying, "Dr. Al Kuwairi was the one who arranged the system."

The soon-to-be Dr. Al Kuwairi's desire for fame parallels her desire to fulfill her societal obligations.

Communal sentiments were also recorded in interviews with male students, many of whom also articulated a patriotic sense of duty to enhance medical provision in their respective countries. Nilüfer Göle reported similar findings in her sociological study of Turkish university women training to become physicians, pharmacists and teachers who claimed that their training was undertaken in efforts to serve Muslim women and society. Critical of the individualism Western women accrue through working, her Turkish informants framed their employment aspirations "as an integral

part of the collective Islamist movement and orient this toward the benefits of society” (Göle 1996: 101). For these actors, a professional training is in alignment with their nation’s key values and contributes to a shared community vision of the common good.

Several factors facilitate Qatari students’ proactive stance in support of the nation’s priorities. In line with the government’s development objectives, Qatari medical students are fully funded and are therefore cognisant of their obligations to the state upon the conclusion of their training. Unencumbered with heavy student debt, loan repayments are a non-issue for Qatari students. Further, the high standard of living accorded Qatari nationals means that few indigenous doctors are enticed to pursue potentially lucrative roles as physicians abroad.

Setting themselves apart

While WCMC-Q graduates are certainly qualified to manoeuvre effectively in the global domain of medicine, this is of little concern for most of the students from Arabic-medium schools. The acquisition of a US medical degree does not, therefore, constitute a strategy for mobility so much as a passport to job security and upward professional mobility *within* their homelands. In this way, their American professional education functions as a mechanism of career trajectory, but in a domestic sense as opposed to a global one.

Employing phrases like “gold standard” and “world class”, many students said that in their countries American degrees are perceived to be the best and therefore confer a certain level of prestige upon recipients. This concurs with Ong’s assertion that American university graduates, “...the world over represent a global standard of professional excellence based on the calculative attitude and practice, articulating with egoistical individualism and self-enterprise in a spectrum of fields” (2006: 155). As prospective American medical graduates themselves, many students articulate an expectation that they will be regarded as highly competitive candidates for domestic

medical positions and promotions because of their international credentials and high quality training. Obtaining a Western degree in medicine becomes a means of differentiating oneself from one's professional colleagues. Thus, undertaking the US medical degree is part of a long-term strategy geared to ensure successful futures at home rather than abroad.

Contrary to Ong's supposition that, "sites of education and zones of knowledge employment have a deterritorializing effect on citizenship by residents", the Arabic-educated actors involved in the Education City enterprise articulate a different rhetoric. Academic cosmopolitanism is not the objective, but rather their participation in American education in the Gulf obviates the need to study abroad, yet still yields the same branded credentials and exposure to first-rate training. Few undertake these degrees to make themselves more competitive in a global marketplace or to obtain citizenship outside of the region, but rather to contribute to the development of domestic health care.

Further, participation in this transnational experiment in medical education affords the young students unprecedented opportunities to encounter, experience, examine and glean a perspective of the [American] other. This cross-cultural interfacing arising from the actors' dual-sited training renders students acutely aware of their Arab identities and seems to heighten their appreciation of their Muslim/Arab values whilst strengthening their affinities to their homelands. In particular, they are in a position to compare and contrast health care provision in American and their non-American settings. In spite of the fact that WCMC-Q students will graduate with US credentials and that many will undertake American residencies as FMGs, the prospect of remaining in America indefinitely is undesirable (especially for Qataris). Hence, what we have here are strong ties to the homeland and the emergence of stronger and more definitive national identities resulting from Qatar's engagement in globalising projects. These observations directly contravene claims of the weakening of the nation state and the homogenisation of identities so often associated with

globalisation. Rather, engagements with transnational academic and medical circuits are serving to reinforce student-doctors' ties and obligations to their nation states.

CHAPTER FIVE

Absences and Presences in the Provision of Medical Training

“The infusion of everyday life, including production and consumption as well as cultural forms, with temporally and spatially distant events marks the modern world. This world requires a delicate balance of co-presence and absence. This balance can be achieved only through struggle, in part because it is often not apparent just which tasks require what kinds of media or the appropriate ratio of each for a given task...even though the available technologies may change, the limits of expert knowledge as well as the interactive skills and social learnings of human actors have not.”

(Boden and Molotch 1994: 277-78)

The transnational Cornell enterprise was initially based on the supposition of sameness and compatibility of human and cultural forms in distant contexts. Yet, it quickly became apparent that certain bodies – both physical and conceptual – are conspicuously absent in the transnational model of medical education being set up in Qatar. The term “body” is used here in two different senses: a corporeal sense (e.g. physical beings such as experts, staff and cadavers); and a conceptual sense – “bodies of knowledge” (e.g. collective concept pertaining to a corpus of knowledge, functional skills and activities used in specific professional and cultural domains). In some cases, these absences necessitate the implementation of substitutions, transformations or alternate strategies in the delivery of the curriculum to Qatar. These adjustments ultimately alter and shape the morphology of the transplanted “American” medical degree as it becomes embedded in the new site.

How the programme works

Up to seventy percent of the lectures are recorded and video-streamed from the NY campus. Thus, the original lecture is delivered first to the NY cohort at which time it is recorded and subsequently broadcast seven thousand miles away in a lecture hall in Doha. That the majority of lectures originate in and are conveyed to a live NY

audience has interesting implications for the content, assumptions and language employed. Recorded video-streamed lectures (VSLs) are supported by weekly Live Video Conferences (LVCs) where the students in Doha congregate late in the afternoon in order to have a face-to-face session at 7 am or 8 am with the professor stationed in NYC. In other cases, upon conclusion of a teaching block in NY, the professor travels to Doha to teach the same material to the students at WCMC-Q. Thirty-two faculty members based in Qatar teach the Medicine, Patients and Society (MPS), Evidence-based Medicine (EBM)⁷⁰ and ethics courses as well as facilitate case-based conferences, journal clubs, Problem-Based Learning (PBL)⁷¹ and all laboratory sessions on-site.

There are a number of structural realities that account for a large proportion of the medical instruction not being delivered “in person”. Foremost amongst these reasons are issues related to medical faculty recruitment, including: the cost of maintaining resident faculty members abroad; the reluctance on part of faculty to leave well-established research laboratories in the metropole; the absence of an active academic research and publishing community in Qatar; the perceived negative impact on career progression; clinical commitments to patients; financial reasons related to private practices and pharmaceutical endorsements; unwillingness to uproot families; and apprehension concerning safety in the Arab world in a post 9/11 environment. To circumvent the absence of a sizeable faculty in Doha, it has become necessary for Cornell to create virtual communities in order to make the remote NY teaching staff “present” at the new branch campus.

⁷⁰ Evidence-based medicine is a five-step process (i.e. assessing patient, asking a clinical question, acquiring evidence, appraising evidence for validity and applicability and applying the information gleaned from the process) that came to the fore during the 1990s. Dr. David Sackett, a pioneer of the practice, defines EBM as “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of the individual patient. It means integrating individual clinical expertise with the best available external clinical evidence from systematic research (Sackett 1996).

⁷¹ Problem-based learning is a cooperative student-centered instructional method used in the delivery of core basic sciences material. It focuses on learning through engagement with medical scenarios that the students are likely to be confronted with as practicing physicians. Students are responsible for defining their own learning objectives subsequent to independent self-directed study. Afterwards, students report their findings back to their small peer group and further refine their knowledge.

In this chapter, I aim to demonstrate how the distinctive configuration of absences and presences shape the educational programme and result in the emergence of an innovative pedagogical form. To this end, the chapter explores what is intentionally or unintentionally being developed and transferred between the two campuses, as well as any unintended side effects of transplanting an exogenous medical education into another country. Flows between core and periphery are a key theme in this chapter and in the discussion of globalisation in general. The transnational programme is not simply a process involving the exportation of “universal” knowledge from the US core, but also involves reciprocal influence, co-production and a system that generates a process of feedback in the opposite direction. In particular, this chapter focuses on local developments that occur in the provision of medical training at WCMC-Q and seeks to address the question of whether or not distance/absence can be adequately overcome by technology and the transporting of specific components of the training package from the centre to the periphery.

Circumventing absence via the presence of technology

Just how do these realities of presence and absence relate to the configuration of technologies used to facilitate the Cornell experiment? Through heavy investment, Qatar now has the necessary infrastructure in place and possesses the advanced technologies required to support a rapidly evolving health care and educational system. The technologies used in the delivery of the medical programme are broadly classified as medical apparatus (e.g. stethoscopes, x-rays, imaging equipment including magnetic resonance imaging (MRIs), computed tomography (CTs), mammograms, ultrasounds); or information and communications technologies (ICT) (e.g. computers, software, Internet, video-streaming, video-conferencing, digital file transfers, distributed e-library, digital microscopes, video surveillance, personal digital assistants). The former represent technologies for examination of patients, whereas the latter are technologies that facilitate communication between faculty and students. How ICT has expanded new opportunities for creating educational linkages that hitherto did not exist in the state of Qatar is central to this chapter.

The virtual exchange of knowledge, information and communication between the campuses has the effect of deterritorialising Cornell's medical programme. No longer restricted to American academic and clinical settings, the corpus of medical knowledge and information are now transmitted across international boundaries. Weill Cornell is no longer just a fixed medical college offering a traditional medical degree, but rather, has become a node in an interconnected network that extends and delivers its pedagogical activities and services to distant pupils.

State of the art technologies feature prominently in the transnational educational model operating at WCMC-Q. The educational arrangement – assembled as it is to reproduce a recognised medical degree – requires both material and virtual proximity in order to facilitate the exchange of Cornell's faculty and pedagogical resources, and to support the full spectrum of educational encounters associated with this professional training. Technology plays an integral role in the creation of such perceived institutional proximity and is thus fundamental to the success or failure of the educational experiment.

Both campuses are unique entities, comprising “distinctive constellation[s] of specific presences and absences, of social privileges, values and regulation” (Ong 2005: 339). Despite the two campuses offering “educationally equivalent programs”, the main structural differences lie in the way in which each institutional setting assembles actors, materials and information within their respective realms. The new branch of the medical school is itself an amalgamation of technologies, Qatari and American institutions and infrastructures – a compilation of material and immaterial mechanisms put together in a novel transnational spatio-temporal recasting of tertiary education.

In Chapter two, I discussed how the dispersed nature of the collaborative medical programme constitutes a unique configuration that can usefully be conceived of as an educational “assemblage”. I drew on Ong and Collier's rubric of the “global

assemblage”, a useful device in the study of phenomena that “assume spatial forms that are non-isomorphic” and that transcend conventional notions of local, global and transnational (2005: 3). The assemblage represents the actual ensemble of ethical regimes, techno-science, and administrative systems that come together in a specific situation. Certainly, WCMC-Q serves as an example of how “the proliferation of technologies across the world produces systems that mix technology, politics, and actors in diverse configurations that do not follow given scales or political mappings (Ong 2005: 332). In light of these circumstances, how the Cornell assemblage is specifically compiled occasions an opportunity to examine how the nascent site of medical training negotiates contingent absences and presences through innovative institutional arrangements, knowledge transfers and technical interventions (Ong and Collier 2005: 15). In particular, the absence of an endogenous system of medical training compels Qatar to introduce external mechanisms and to pioneer strategies in a bid to compensate for an absent, but essential expertise. To this end, the Qatari-based campus relies largely on the importation of faculty, regional students, institutional frameworks and pedagogical materials. The conjuncture of specific absences and presences are worth examining in detail for these are the conditions in which WCMC-Q is sustained and which ultimately shape and enrich the programme. This chapter commences with a personnel audit and an overview of the range of conditions deemed necessary for a successful WCMC-Q training, followed by a systematic review of the pedagogical mechanisms (e.g. resources and knowledge dissemination) as they are reconfigured in the formation of the Gulf-based medical college.

Absence and presence of specific forms of expertise

The absence of an adequate supply of local expertise has profoundly shaped the organisation and staffing of WCMC-Q. The desire to deliver the same degree programme has forced the enterprising college both to extend the remit of its NY faculty, as well as compete in a global marketplace for a limited supply pool of academic and technical talent. The absence of a comprehensive in situ faculty in

Qatar has forced Cornell to think creatively about not only how to mobilise and stretch the teaching capacity of its NY faculty, but also how it utilises cutting-edge technology to circumvent the shortage of expertise whilst delivering the same calibre of medical training to the small cohorts in the distant locale. Effective transmission of the degree to two physically disparate sites has led the college to devise an innovative and interactive pedagogical model that creatively manages working relationships across time and space. The medical curriculum at WCMC-Q is strategically delivered by a team of thirty-seven⁷² medical faculty members who are resident in Qatar (referred to administratively as on-site faculty, or OSFs), as well as remote lectures broadcast from NY featuring subject experts.

Technical experts

WCMC-Q relies extensively on WCMC-NY for its day-to-day functioning. Thus, success of the transplanted curriculum is highly dependent on a multimodal network of workers situated at both sites who coordinate the physical transfer of pedagogical materials (e.g. textbooks, cadavers, scientific apparatus, the conversion of virtual data into tangible paper handouts) and the use of interactive technologies (e.g. lecture streaming; virtual microscopes; an e-library; electronic transmission of course materials, exams and documents). The assemblage of technological infrastructure at WCMC-Q is uniquely aggregated in order to facilitate specific institutional goals and is therefore, “neither preordained by the technology itself nor free of the material constraints of the physical...properties of the matter, but are instead a compromise between technological possibility and societal action” (Downey 2001: 215). In the case of Cornell, various technologies are compiled to transcend the physical constraints of distance and time as well as to aid in the sharing of a finite supply of pedagogical resources (e.g. microscopic specimens and expertise).

Virtual transmission of the programme is the responsibility of a highly specialised team of workers who ensure that the stream of information between the two

⁷² Faculty numbers reflect the 2009-2010 academic year.

campuses flows smoothly. Through their involvement in activities ranging from systems upgrading and monitoring, web maintenance, technical problem-solving, as well as the routing of uploaded and download data, surveillance, and the streaming of academic sessions, these network system operators mediate the time and space disparities associated with operating a medical programme simultaneously in NY and Doha. Downey, a geographer of technology, refers to labourers of information internetworks as “boundary workers” precisely because their work involves suturing together disparate networks and managing socially constructed virtual spaces (2001: 211). The establishment of the Qatari campus necessitated the decentralisation of technical control from NY and a sharing of protocols between the two sites.

WCMC-Q’s site-based technicians occupy a nebulous space at the intersection of horizontal and vertical divisions of labour. Programme administrators regard them as menial employees because their work is perceived as mundane and routine; of lesser importance than faculty who disseminate medical knowledge. At other times, however, they are viewed as experts owing to their niche expertise which is integral to a work system dependent on the distribution and coordination of specialist IT knowledge (Zabusky 1997). Members of the WCMC-Q technical crew are largely hidden, stationed as they are in offices in a restricted corridor of a peripheral corner of the building, or behind the scenes in small rooms located behind the lecture hall screens. The end-users tend to be ignorant of the complex systems, protocols and robust security features that these boundary workers have implemented and tirelessly maintain. Students and faculty seem to take their networking facilities for granted, assuming that at a touch of a button they will be connected to the WCMC-Q portal whereupon they will gain immediate access to the Web, on-line lectures, course materials and library resources posted on the institution’s Intranet. In other words, the information technologies “tend to be taken as given and transparent for participants who are oriented toward global [transnational] interaction” (Knorr-Cetina and Bruegger 2002: 909). For these essential but invisible processes only become apparent if one catches a glimpse of the person behind the scenes coordinating video streaming/conferencing sessions, or when something fails to work

properly and a technician promptly arrives to provide technical support. In many ways, the IT staff who arrive at sites throughout the college to rectify technical glitches are the “walking embodiments of their invisible service[s]” which are at the heart of the educational transplant (Downey 2001: 225).

A taxonomy of presence and absence

Until recently, perceptions of “presence” and “absence” were relatively straightforward, contingent as they were on the physical state of being, or not being in a particular place (although the use of telegraphs, telephones and photography may also have brought these issues to the fore). The advent and ubiquitous use of virtual technologies in the transnational medical programme, however, somewhat problematises these definitive definitions as they blur the notions of what constitutes *actually* being present in, or *actually* being absent from, a grounded location. Media technologies now enable a proximate image of an actor to be transmitted virtually and the mimetic representation to be displayed on a screen at an alternative site, with the individual all the while remaining stationary in his/her original location. Through electronically mediated technologies, a person can achieve a pseudo-presence enabling him/her to transcend his/her real position and to engage in real time with actors in a different social space.

Co-presence

Spatio-temporal conditions have always shaped human interaction, yet technical advances have fundamentally altered the temporal and spatial parameters of many of these social engagements. Goffman describes co-presence as a condition which enables individuals to “sense that they are close enough to be perceived in whatever they are doing, including their experiencing of others, and close enough to be perceived in this sensing of being perceived” (1966: 17). In other words, the encounter is socially meaningful because each party involved senses the other. While Goffman’s explanation is useful in that it underscores the experience of

perception, much has changed on the telecommunications front during the intervening four decades. His explanation predates the proliferation of virtual technologies and presumes the physical proximity of participants. The experience of co-presence – the subjective experience of being with others – is no longer limited to co-location, but can now also be achieved through wireless technologies. In light of the propinquity of faculty and students fostered by technological advances, it is perhaps more helpful to conceive of co-presence as being structured along two primary axes: proximity (physical or electronic) and corporeal presence (where one, both or neither parties may be present at the physical location) (Zhao 2003), thus warranting a more nuanced approach.

Embodied presence versus response presence

To overcome the inherent paradox of presence/absence introduced by the use of virtual settings, Knorr-Cetina and Bruegger introduce a distinction between “embodied presence” and “response presence”. The former is a spatial relationship characterised by co-location, or face-to-face interaction; whereas the latter refers to “situations in which participants are capable of responding to one another and common objects in real time without being physically present in the same place” (2002: 909). A response presence event is an electronically mediated encounter that relays an impression that all participants are congregated at one venue. This perception is achieved through a network of technologies that function as “the arteries of global and transnational connectedness through which the interactions flow” (Knorr-Cetina and Bruegger 2002: 909). High-speed transmissions and large screens upon which images of absent actors are projected, are indispensable in the generation of response presence. The broadcasting of live lectures or participation in video-conferences are situations that make professors and medical students interactionally present, enabling the actors to interface with each other despite the distance which physically separates them. In other words, actors can now be rendered mutually accessible for pedagogical encounters irrespective of location.

The implications associated with different types of pedagogical presences and absences inherent to distance education remain under-theorised. The institutional interactions occurring between the Cornell sites provide useful exemplars of both modes of co-presence, relying on regular interactions of co-present communities who congregate physically or virtually to facilitate knowledge sharing. Just as organ transplantation no longer requires the physical proximity of the donor and recipient (because of improved transport, drugs etc.), in some teaching scenarios co-presence is deemed unnecessary for the actual transfer of scientific knowledge and abandoned altogether. Cornell's distinctive institutional arrangement involves a combination of specific presences and absences in the delivery of its programme, each mode affording a different degree of intersubjectivity.

Intersubjectivity

The conversations that occur in face-to-face encounters (embodied presence) and between distanced participants in face-to-screen exchanges (response presence) are markedly different because each pedagogical approach brings into play a specific set of mechanisms of intersubjectivity,⁷³ thereby rendering certain modes more conducive than others to the delivery of particular facets of the curriculum. The rationales behind the selection of particular modes of transmission for specific types of information transfers are illuminating, indicative as they are of what kinds of bonds programme administrators deem to be both necessary and effective in medical training at a distance.

Of course, how these decision makers conceptualise student agency on the non-American campus is pivotal to the design of the pedagogical programme. Upon the acceptance of students into the Medical Program, the institution works on the assumption that the students are adult learners who appreciate that they are joining a respected profession and that they are paying a lot of money to attend one of

⁷³ The subjective involvement between participants in which shared cognition and consensus of meanings function as resources that help actors to interpret aspects of social and cultural interaction (Crossley 1996).

America's premier medical colleges (except Qataris who attend WCMC-Q at the state's expense). A pedagogical strategy that caters to adult learners expects students to be responsible for their own learning and works on the presumption that learners are autonomous, self-directed and goal oriented. On this basis, the structure of teaching at WCMC-Q works on the assumption that all lectures are equally relevant and that students will be interested in and engage with the subject matter regardless of how the information is delivered. Taking the range and configuration of teaching methods as a point of departure, I turn now to how different forms of medical knowledge are disseminated and what types of intersubjectivity are involved during transmission.

Face-to-face presence

The delivery of a live lecture to the NY cohort of students is one example of face-to-face communication (the recorded version subsequently viewed in Qatar is not); professors flying in to lecture at the Doha campus comprise another. Yet, although a form of embodied presence is evident in both scenarios, the dynamics associated with them are dissimilar when encountered at the Qatar end. In the example of the live lecture recorded at the point of delivery, the NY lecturer relays information to a NY audience, all of whom are embedded in the original setting. Intersubjectivity is thus cultivated because both parties occupy the same socio-cultural milieu and, in some cases, shared world-views.

When professors fly in to Doha to deliver a lecture, embodied presence requires the expert to be physically relocated and immersed in a different social environment, but one that the trainee-doctors are intimately familiar with. In this example, intersubjectivity may be hindered owing to divergent meanings or presumptions about content, and the presence of socio-cultural constraints in the secondary setting that were not in the primary setting. Boden and Molotch maintain that individuals and organisations strive for co-present interaction on the basis that this mode of communication conveys far more information than others, "thick" as it is with

physical and aural nuances including: “facial gestures, body language, voice intonation, and a thousand other particulars” (1994: 259). Combined, these multiple cues provide a means of reciprocal feedback enabling participants to address “circumstantial contingencies” more readily. The obvious benefit of interfacing face-to-face in both environments is that both lecturers and learners can immediately communicate understanding or misunderstanding of the subject matter at hand. Face-to-face (embodied) interaction is an expensive option and only occurred in approximately 30% of the pedagogical encounters, thus use of this mode of teaching is highly selective. It is noteworthy that all practical, clinical and analytical courses are taught by OSFs.

Consistent with Boden and Molotch’s observation that businesses, “place a premium on co-presence because of the frequent need to develop complex understandings... and deal with unanticipated tensions” (1994: 272), times of tension at WCMC-Q resulted in an upgrading of the level of interaction between the two campuses, especially at times when medical training conditions became “sensitive, complex, or uncertain” (Boden and Molotch 2004: 270). When unanticipated issues arose as the inaugural cohort progressed through the Medical Program, problems often occasioned the need for in-person meetings with faculty and students. The institution resorts to embodied co-presence as a means of ameliorating distress and monitoring student responses. The 2007-2008 academic year was the final year of medical school for the first cohort of WCMC-Q graduates. It included US electives, applying for residency programmes (in most cases as IMGs), Match Day and attendance at graduation ceremonies in both Doha and NY. During this angst-ridden year, face-to-face meetings provided opportunities for US-based faculty to become personally familiar with the Doha contingent and to empathise with student concerns. Thus, a high premium is placed on embodied co-presence as it functions as a mechanism for establishing rapport with students and building up trust.

Problem-based learning (PBL) sessions also involve the co-location of students and faculty, yet here, the role of the OSF is reconfigured from conventional knowledge-

provider to that of a learning facilitator who guides the learning process. Inquiry-based learning is intended to function not only as a means of developing medical student capacity to move from facts to critical thinking, but also promotes an active and self-directed approach to learning as well as the development of communication skills. Because of this, PBL sessions provided an interesting vantage point through which to observe faculty expectations interfacing with student performances.

Professors – who reference their experiences of teaching PBL in American classrooms as a benchmark – expect students to be able to rigorously interrogate the problem materials and to confidently articulate their findings. It was after these sessions that several Qatari students complained of being singled out and encouraged to speak more in class. Once alerted to the Qatari students' perceptions, I began to notice that some well-meaning professors (particularly newcomers to Qatar) did indeed have a tendency to probe and prompt Qatari students more than their peers. In particular, there seemed to exist (at least initially), a stereotype of the shy and demure Qatari female, as well as prefabricated ideas of Arabic-educated students as passive learners. As the course progressed and students gained confidence in their spoken English, these incidents became less common.

Strict health and safety codes and liability issues provide another obvious reason for faculty's attendance in certain learning contexts. The Pre-medical Program, especially during first and second year labs (when many of the students are learning how to *do* science (e.g. conduct experiments, handle equipment), and the latter stages of the Medical Program (when students learn how to *do* medicine) rely predominantly on the co-location of faculty and students. But co-location is also used for other reasons. In particular, the third and fourth years of the medical degree involve sustained periods of embodied co-presence between the doctors-in-training and their educational mentors, in both American and Qatari clinical settings.

This extensive face-to-face interaction coincides with student participation in subinternships and medical electives where much of the physical training in requisite skills occurs. Co-location seems to be the preferred mode of interaction when

demonstrative teaching is involved. It is significant that embodied presence is characteristic of all hands-on activities that occur in the Clinical Skills Centre where students are taught how to interface and physically examine patients (the part of their training that is often likened to “apprenticeship”). Acquisition of these tangible skills demands close observation of professionals in action. Again, the sensitive and uncertain nature of these intimate interpersonal encounters renders them more susceptible to unforeseen complications, thus co-location ensures that an expert is on hand to provide help and support.

Close alignment of the activities taking place on each campus is vital to successful replication of the medical programme and WCMC’s complex network configuration enables the frontiers of American medical education to be stretched, whilst simultaneously closely weaving the two campuses together. While this facilitates effective educational exchange, there still exists an intensified “need for co-presence among those who coordinate dispersed activities” (Boden and Molotch 1994: 274). Students, faculty and high-level administrators regularly move back and forth between the two campuses: students, for the purpose of undertaking specific components of their training; faculty, to coordinate curricular continuity; and administrators, in order to deal with broader organisational and managerial issues impinging on the programme. Students and faculty movement is largely predictable, owing to the set nature of the academic timetable, whereas the movement of administrators (i.e. deans) is, at least partly, unscheduled due to unanticipated meetings called to address unforeseen problems that occasionally arise in the nascent programme. The combination of the seven/eight hour time zone differential between campuses and the different working week in each setting often renders urgent communication rather impracticable; hence, co-location of WCMC and WCMC-Q administrators is considered indispensable to the project.

Face-to-interface: Videoconferencing

In the event that a state of co-location is unattainable, people “ordinarily strive to approximate it as best they can” (Boden and Molotch 1994: 258). Post-live videoconferences (PLVCs akin to virtual seminars) and live videoconferencing lectures (LVLs – live transmission) represent attempts at such approximation. Live videoconferencing allows two-way communication to take place between the expert and the remote audience assembled in Qatar.

PLVCs and LVLs constitute “globally distributed conversation[s]” and virtual platforms upon which actors congregate for the purpose of imparting/receiving knowledge pertinent to the curriculum (Knorr-Cetina and Bruegger 2002: 914). Videoconferencing is beneficial in that it permits reciprocal observation and allows both teachers and learners to engage with each other in real time, despite being located in different spaces. An interval of several days usually exists between the observation of a professor’s recorded lecture and the opportunity to pose questions retroactively to the expert about the material during a PLVC. This loss of temporal immediacy seems to result in fewer questions being asked (to the extent that local faculty instruct students to come prepared with a batch of questions), however, these sessions are useful for clearing up uncertainties and diminishing stress about upcoming quizzes and/or exams. The fact that each party is visible to the other precipitates active engagement and mutual attentiveness from all interlocutors.

Despite sharing the same institutional name, many of the NY faculty seemed relatively uninformed of what was going on at WCMC-Q. In contrast, many WCMC-Q students and faculty, immersed as they were in the venture, could not fathom how little awareness the NY contingent had of the shared programme. The Doha contingent frequently expressed concern regarding the apparent lack of cross-institutional awareness of the new venture. Most vocal among those concerned were members of the graduating cohort, their observations tinged with anxiety as many had hopes of securing US residencies. Several of them wondered what chance they had of attaining one of the competitive positions if so few people *at Cornell* were even familiar with their training.

In a bid to further integrate the programmes, in November 2009, Cornell commenced a pilot project which now assembles faculty, students and colleagues at both sites for biweekly live surgery and pediatric grand rounds from NY and other top academic medical facilities stationed around the country. Grand rounds, considered by many to be a cornerstone of medical education, consist of a clinical case of a patient being presented to and discussed amongst an audience comprising physicians, residents and medical students. The inclusion of WCMC-Q participants in grand rounds constitutes an important component of medical acculturation and contributes to the formation of a transnational professional peer group.

Face-to-interface: Video-streamed lectures (VSLs)

Formal lectures at WCMC-Q are either delivered in real time or, more commonly, asynchronously where the delayed transmission of a lecture occurs independently from the original in recorded VSLs. VSLs tend to be used primarily in the transmission of “hard science” courses, the same courses that are supported by thick prescriptive textbooks from which readings and exercises are derived for course support. The corpus of scientific facts seems to be regarded as both definitive and non-contentious. In other words, the presence (embodied) or pseudo-presence of a real expert can seemingly be dispensed with without compromising the quality of knowledge transmission. It should be noted that even though the expert is absent, Cornell does try to ensure that an OSF attends every VSL (discussed below).

Sometimes when skills training involves dimensions of the doctor-patient encounter, disconnects surface between the recorded lecturer and students’ conceptions of issues such as: physician authority, patient agency, confidentiality and the maintenance of professional distance. When this occurs it becomes imperative for the OSF to step in and arbitrate divergent expectations and understandings.



Figure 8. VSL from NY. Photo: Martin Marion

Despite the lack of face-to-face communication, many Arabic-educated students express a preference for this mode of knowledge transfer. ESL students explained that one of the primary advantages of VSLs is that they can watch the video several times in their own time allowing them to return to sections that they did not understand during the first screening. Several Arabic-educated students contend that reviewing VSLs is far more beneficial and temporally economical for them than reading lengthy chapters and having to sift through extraneous material. One student explained that she considers the recorded lecture to be “a parcel of information” containing all the pertinent information she needs to know for exams. Her comment underscores Arabic-educated students’ pervasive preoccupation with effectively managing their time, learning the English-medium curriculum and completing “time-consuming” readings and assignments. The perceived academic benefits and flexibility of VSLs contradict Boden and Molotch’s contention that “‘co-present’-interaction is both preferred and necessary across a wide range of tasks” (1994: 258). From an administrative position, aside from cost, a main benefit of VSLs is that even though the lecturer may not be able to visit the Doha campus, his/her expertise can still travel. This view is echoed by students who, for the most part, seem content with VSLs on the basis that taped lectures guarantee that they are receiving identical information to their NY peers, delivered as it is from a pre-eminent expert in the subject. This expert is also the person responsible for setting quizzes and the ever-

important final examination, and so students do not feel disadvantaged as a result of relying on his/her recorded lectures. While generally regarded by students as less interesting in comparison to other forms of knowledge exchange, VSLs also throw interesting light on student agency. Some students acknowledge that they can afford to skip the occasional VSL without compromising their learning because they have unlimited access to the recordings.

VSLs followed by PLVCs were the predominant mode of lecture delivery throughout the duration of my research. Although unconfirmed by any administrator, an ICT specialist told me that owing to the inaugural cohort's superior academic performance, certain NY faculty members were of the opinion that VSLs gave WCMC-Q an unfair advantage over their NY peers and because of this, the college had plans to move towards the broadcasting of more live videoconference lectures (LVLs) in the future. Indeed, as predicted, the trialling of LVLs commenced towards the end of my fieldwork.

In a rare classroom appearance, the dean of the medical school informed a second year class of an upcoming mandatory LVL and announced the possibility of changes in the delivery of the programme. In what sounded like a rehearsed list of advantages, he cited improved technical capabilities and the chance to improve teaching quality as the motivating factors behind the proposed curricular alterations. He also emphasised the pedagogical soundness of the pending LVL trials pointing to the fact that these live video by conference lectures would not be video-streamed as in the past but would be "live lectures from NY specifically for [them]." The dean then pre-empted the issue of timing by making light of the fact that students who liked to sleep in could now do so, and those who like to study early in the morning would now be able to. Much to the vocal dismay of the class, in order to accommodate an increased number of LVLs, the daily schedule would need to commence later in the day. The vast majority of students who were already displeased with the current timetable that concludes between 3 and 5 pm were vocal in their complaints that finishing later in the evening would give them less time to complete assignments, study and further restrict time with their families. Leaning over, a Qatari female whispered to me privately that the proposed time changes (commencing at 10 or 11 am and concluding at 5 or 6 pm) could potentially compromise four prayer times depending on the lunar calendar. A student drew attention to

the fact that unless alternative arrangements were to be made, students living in the dorms would miss the narrow two-hour meal window at the communal campus cafeteria, the only site in Education City available for dinner (at that point in time). The dean shook his head in acknowledgement of their concerns. At the conclusion of the meeting, the dean also announced another pilot project designed to test the feasibility of utilising podcast lectures. As if offering an olive branch, the dean handed out six packaged 5th generation video i-Pods to preselected students as he explained how the technological experiment would involve the downloading of audio podcast lectures. Stating that should the participants deem such technology practical it would be made more widely available. He closed by highlighting the fact that podcasts would afford students many of the same benefits as VSLs, then turned on his heels and left the auditorium.

While live videoconferencing permits reciprocal observation one another, pre-recorded VSLs do not. Thus, it is common for students to nap, complete assignments or surf the Internet during the broadcasting of VSLs. VSLs alone do not seem to command the same level of student attentiveness and commitment that interactive pedagogical strategies do. Be they recorded or live VSLs, a designated OSF (e.g. Course Director) usually attends the lecture broadcast from the US so as to be kept abreast of any changes in course content (especially important in the rapidly developing field of science). The ultimate purpose of the OSF is to be the faculty member responsible for the material at the branch campus and as such, this position does not exist on the NY campus. The breadth of information in each module (e.g. Brain and Mind, Basis of Disease, Human Structure and Function) is such that the OSF cannot reasonably be expected to have the required level of expertise in every area of the subject and for this reason the OSF relies on the expertise of faculty members located at the NY campus. In addition, the OSF acts as a facilitator and helps to clarify any points that are not obvious (e.g. occasionally the OSF will pause the lecture to clarify the meaning of words or provide an explanation of culturally-bounded concepts). Whether an intended fringe-benefit or not, his/her presence functions as a deterrent against skipping as evidenced by the large number of students who decide not to stay for the duration of a VSL in the absence of an OSF.

Aside from acting as a cultural broker and proctoring lectures, the decision to introduce OSFs into the lecture hall may also be related to the importance of conveying “the right impression to NY.” A great deal of staging precedes any live videoconferencing session precisely because it commands a level of intersubjectivity between the distantiated campuses. Students are routinely instructed to congregate in the first three aisles in the centre of the lecture theatre in order to be visible in the video camera’s field of vision. This positioning serves to create the impression that most of the class is present (essential to demonstrate not only commitment to the subject, but also conveying respect for their early-rising NY professor). In light of the perceived need to promote a positive image of the new college and to demonstrate the calibre of WCMC-Q students to their American colleagues, a number of OSFs stress the importance of making sure that everyone comes prepared to ask intelligent questions or ready to comment on some aspect of the lecture.⁷⁴

The recorded lecture is delivered live to the NY cohort which means that the lecturer engages directly with the American audience. Thus, any perceptible intersubjectivity captured in the recorded lecture is that which exists between the US lecturer and his/her NY audience. The OSF compensates for the absent lecturer by checking for understanding in the Doha setting in a way that the recorded lecturer cannot. Sometimes NY faculty members commence their recorded lectures by acknowledging the absent (future) audience in Qatar with a cursory greeting like, “As-salamu alaykum”, but aside from that, most lectures proceed as if communicated solely to the NY cohort, irrespective of the Arab/Muslim students as evidenced in my field note:

WCMC-Q students were shown a video-streamed lecture from NY that included an instructional film clip of how to perform a rectal examination. Having reviewed all of the external steps of the clinical exam, the doctor on the antiquated film issued the following step-by-step instructions: Have the patient disrobe and stand with his legs spread shoulder-width apart,

⁷⁴ Impression management is just as important for OSFs, whose professional stature and future job prospects might be affected by external perceptions of WCMC-Q as a high-calibre academic institution verses some third-tier foreign branch campus.

with toes pointing inwards. Give the patient tissue so he can wipe the excess KY jelly after the exam is over. Have the patient spread his own buttocks and insert your index finger in a pistol-like position and sweep from side to side...I was sitting in between two veiled females – both of whom looked visibly shocked. When the demonstration film concluded, the lecturer addressed his NY audience with the offhanded comment, “so tonight when you go home, all the women in the room should feel their husbands’ or their boyfriends’ vas.”

The above scenario clearly demonstrates that not all transplanted information “passes” seamlessly during educational transfers, and reveals a number of issues that arise when embodied presence or response presence are absent from the teaching encounter. As mentioned earlier, VSLs are useful in the transmission of straightforward factual data and less so for conveying information related to physical processes or precarious interpersonal encounters. The sensitive material conveyed in the example recounted above falls into the latter category and might therefore have been better taught in person by an individual familiar with the local environment. For instance, even though it was an obvious attempt at humour, there exists an assumption on part of the lecturer that his students are sexually active (as the majority in NY may well be), evidenced by his parting comment. This situation is far-removed from the social constraints that shape the absent students’ world views. Premarital sex is not normal practice in the Gulf setting where, from the onset of puberty, Arabic Muslims are segregated by sex. Based on the accounts that I was privy to, most of my Doha-based informants’ experiential knowledge of bodies of the opposite sex was gleaned in the anatomy lab. Nor were all students in Doha familiar with the lubricant KY jelly, which became apparent when three students asked me what it was after class. VSLs do not afford an interactional platform wherein the lecturer can detect non-verbal reactions to the material as it is presented, nor can students directly query the presenter with regard to unfamiliar references, concepts, idioms or vocabulary. This problem has however, been overcome largely through the intervention of OSFs.

The broadcasting of experts from a distance without lecturer-student co-presence has a profound impact on academic expectations and assumptions pertaining to the distanced student population's familiarity with specific bodies of knowledge. Similar to the knowledge flows of global banking markets studied by Knorr-Cetina and Bruegger, as the curricular information is transmitted from the NY campus, it becomes "disembedded, [leaving] behind its natural embeddedness in local and physical settings" (2002: 915). Just as the traders in the aforementioned study contend that trading floors are identical regardless of context, many faculty and administrators involved in the Cornell enterprise assert that the corpus of scientific and medical knowledge is universal, both in terms of understanding and application. Knorr-Cetina and Bruegger pose an important question regarding whether or not intersubjectivity can be achieved by territorially dislocated individuals, and if so, question specifically, "what passes" given that spatially separated participants "may never share the same space on the level of consciousness, interpretation, or reciprocal orientation" (2002: 920). For us, the question may be reconfigured to assess what parts of a medical curriculum do, or do not translate between the two locations and what factors facilitate or impede flows of knowledge? A fieldnote excerpt provides an illustrative example of a knowledge gap arising from cultural incongruity:

The case of alcohol

At the conclusion of a long day at the hospital, a Qatari student bounded up to me and relayed the following story. Earlier that day, during her ward rounds with a Western consultant, she had been informed that one particular patient was an alcoholic. The third year student, keen to understand how the physician had reached that conclusion, naively inquired about the colour of bottle that the patient had been drinking from. She was promptly told that the colour indicated nothing but rather that it was the quantity and type of alcohol consumed which was important for her differential. Despite her embarrassment, the student said that she was glad that she had posed the question in the Gulf setting as opposed to America where she was soon due to start her subinternships. Keen not to make another mistake, she suggested that it would be useful if I could brief her on everything she needs to know about alcohol.

She admitted that her limited knowledge was gleaned from movies, where she has seen characters holding different shapes, sizes and colours of bottles.

Muslims consider alcohol to be *haram* (forbidden or prohibited), therefore, students reared in Islamic households have little or no exposure to alcohol in their social settings. Thus, knowledge of alcohol is often beyond many of the students' sociocultural frames of reference. Yet, the WCMC-Q curriculum does not provide any background information about alcohol. This is because there is an underlying assumption that students are alcohol-literate, including having a knowledge and understanding of measures; the ability to differentiate between wine, beer, spirits; an awareness of the effects of alcohol; familiarity with Alcoholics Anonymous; an expectation that students know how to elicit information from patients about alcohol consumption and how to recognise alcoholism. Indeed, most of their American students would possess a working knowledge of these things. In the clinical context, students are expected to be able to identify alcohol-related pathologies and demonstrate an ability to take meaningful social histories of patients, including the culturally sensitive issue of alcohol consumption. However, most Gulf students struggle to interpret their findings as one student admits, "If someone mentioned a certain drink, I would have no idea whether it has a high alcohol content or what is too much. We're not taught that and we don't learn that from other sources. It's challenging even when a patient tells you his drinking habits. I just take note of it and then go look it up because I have no idea what he's saying."

Medical knowledge and terminology is taught exclusively in English. Success in US subinternships, electives and American examinations (i.e. USMLE and OSCE) demands that students attain fluency in English and familiarity with all things American. I regularly observed looks of incomprehension being exchanged amongst the Arabic-educated cohort when references to culturally-bounded phenomena were made, such as Weight Watchers, Alcoholics Anonymous, the Bill of Rights and Medicaid (to name a few) as well as when advanced terminology was employed. Students would often pass me a note during lectures or ask me about specific words

after class. Lectures and written materials contain references to alien brands and objects not generally available in their immediate social terrain (e.g. Excedrin, pretzels, drug paraphernalia, tampons, IUDs and condoms) and are rife with expressions, idioms and humour unfamiliar to non-native English speakers (e.g. indigent, Choose Your Own Prognosis,⁷⁵ par for the course, dry heaves, chasing the dragon, lovers' fracture⁷⁶). For many of the students, especially in the early stages of their training, their knowledge of English is still largely restricted to scientific vocabulary, yet some of the VSLs and lecture notes employ rather advanced vocabulary (e.g. wincing, promiscuity, commence, radiate, unintentionally, smothering, eunuch). As one professor put it, several of the Arabic-educated students are "still at the stage of learning-to-read, as opposed to reading-to-learn." Thus, words that fluent English speakers take for granted are occasionally problematic for students. For instance, during a bell-ringer anatomy exam,⁷⁷ during which time is of the essence, I witnessed two Arabic-educated students struggle to comprehend the specific wording of two question (the words "terminates" and "ascending" were problematic) and approach faculty members for verification (who under testing conditions are not permitted to answer any queries). That both students encountered difficulties interpreting questions at the same stations suggest that the terminology was far beyond their current level of literacy (this is compounded by the fact that exam questions occasionally contained double-negatives – and this practice was not confined to the subject of anatomy).

Teaching bodies

While a good portion of the scientific knowledge and some clinical procedures can be transmitted virtually, other facets of the medical curriculum can be performed

⁷⁵ A play on words from a children's series of novels entitled, "Choose Your Own Adventure".

⁷⁶ A professor's attempt at humour in describing a type of bone break in the foot. She claimed that individuals who are having affairs often sustained this injury because they are prone to escape by jumping out the window when a jealous partner returns unexpectedly.

⁷⁷ Bell-ringers are exams that entail students moving individually from one anatomical specimen to another under strict timed conditions. When a student arrives at the station he/she must identify the anatomical feature and answer a question about the structure.

only with the presence of real bodies, be they living or dead. Cadavers constitute invaluable teaching tools in student acquisition of anatomical knowledge – although a combination of factors render cadavers difficult to come by in Qatar. Amongst these are practices and prohibitions including: death rituals which emphasise quick burial of the dead as directed by the hadith, “Hurry up with the dead body” (Al Buchari 1315), burials generally occur before sunset on the day of the death (provided there are no extenuating circumstances); and an Islamic prohibition concerning mutilation of the corpse as interpreted from the hadith “Breaking the dead’s bone is like breaking it alive” (Ibn Majah 1616) (though surgical intervention such as tissue and organ donation and transplantation is permissible if it is directly linked to saving another life). Few Muslims therefore are willing to donate their bodies for anatomical research. One student explained to me that Muslim belief holds that humans do not own their bodies per se, but rather they are on loan from God and this is why it is important not to desecrate them following death. The dissection of non-Muslim bodies, however, is permitted. The absence of a systematic and organised organ and cadaver programme means that locally obtained cadavers are not available in Qatar.⁷⁸ For these reasons, the medical school currently relies on the importation of foreign bodies that are prepared in NY and flown to Doha for the anatomy courses.

Students also encounter healthy living bodies in the Clinical Skills Center where they learn how to perform clinical procedures on mock patients, known as Standardized Patients (SPs). SPs are specially trained actors who simulate patients presenting with realistic symptoms, diseases and medical conditions. The use of SPs in mock interviews and physical examinations enables both communication and clinical skills to be rehearsed before practising on authentic patients. Serving as practice models, SPs aid student doctors in relating to people as patients and are used extensively in medical education for feedback and evaluation. Unlike NY where there is a gender-

⁷⁸ The HMC 2009/2010 Annual Report announced the creation of a transplant task force charged with implementing a strategic plan to develop a National Organ Donor Registry and a Transplant Center in Qatar. Renal transplants have been conducted in Qatar since 1986 (Rashed and Aboud 2004).

balance of SPs, the majority of SPs trained at WCMC-Q are trailing spouses of Western expatriates, most of whom are female. Although the occurrence of many health conditions varies by gender, the availability of women and the relative absence of male SPs (there was one male) means that the sample population is not representative of that found in the American SP population.

In addition, a special team of male Urological Teaching Assistants (UTAs) and female Gynecological Teaching Assistants (GTAs) are flown in from America for the specific purpose of teaching medical students how to perform the physical examination of genital, breast, vaginal and rectal systems. The professional teaching team – who themselves become the objects of the examinations – instruct students in the use of neutral language (e.g. not to say “please expose your breasts”; or “your breasts look good” as vocalised by two male students during their physical observations) and the technical competencies required to conduct accurate pelvic exams (e.g. use of medical instruments, positioning – encouraging males not to stand between a female patient’s legs during the examination). Each teaching group comprised a WCMC-Q faculty member, a group of four students and the pair of UTAs or GTAs. The session involved one UTA (or GTA) demonstrating the steps involved in the physical exam on the other same-sex TA, after which each student had an opportunity to conduct the exam on the UTA/GTA. The team of four demonstrators included two women (one of whom had a nipple-piercing) and two males (one uncircumcised), providing invaluable opportunities for students to learn how to deal with physical anomalies that might not otherwise be encountered in the conservative Gulf setting.⁷⁹ Though daunting, the use of UTAs and GTAs in the teaching of intimate examinations is beneficial as it allows students to gain clinical experience and confidence, but does not require the use of actual patients.

⁷⁹ Though not normal practice amongst Khaliji Arabs, it is possible that students might encounter more clitorodectomies on account of a higher rate of exposure to women from other parts of the Arab world (e.g. Egypt). Despite the fact that several of the students intend to practice medicine in countries where this procedure is more commonplace, clitorodectomies were not mentioned during any lectures or physical examination sessions that I attended.

The absence of “authentic” patients during the performance of pelvic exams was itself an issue during the first round of GTA/UTA training. Having consulted a Sunni imam regarding the appropriateness of such an exam in such a gender-segregated society, the students reported that the Hanbali jurist deemed performing the exam strictly for “educational purposes” to be inappropriate. The jurist’s verdict is in keeping with Islamic rules of modesty from which several prohibitions are derived (e.g. rules pertaining to what parts of the body must be covered; rules governing the permissibility of looking at and touching bodies of the opposite sex). In particular, his ruling reflects the fact that it is forbidden for men and women with whom marriage is forbidden to observe certain parts of anatomy. Generally, outside the presence of near relatives, it is not permissible for an unmarried male or a female to view or touch genitalia except in an emergency or in the case of medical treatment. The ruling is explicit, medical intervention is the only exception and educational reasons, even if related to medical training do not meet this specification.

When confronted with novel dilemmas, Muslims look to the *fatawa* (religious rulings) of the *ulema* (Islamic scholars) for moral guidance and the parameters of permissibility. The consultation of the imam reflects a concern among Muslim students about the moral dilemmas emerging from their American training. Faced with a secular education, students make a conscientious effort to identify Islamic perspectives and to formulate an ethical regime based on Quranic principles and in accordance with Islamic law (*shari’a*).

As a class collective, the students formally petitioned medical school administrators on the basis that pelvic examinations are only appropriate if they are conducted as a form of medical intervention. The former Course Director and the American TAs mentioned that there was a lot of anxiety surrounding the pseudo-patients’ arrival the first time round. Three years on, after observing several days of pelvic examination training sessions, I sat casually with the TAs over coffee and spoke with them about how their WCMC-Q experiences compare and contrast with those at WCMC-NY. The TAs said that the students in Doha expressed far more concern about the

examination's capacity to compromise a girl's virginity (in Qatar, routine gynaecological exams commence only after marriage). One UTA recalled their introductory meeting with the students. Expecting to field some routine questions as they do in NY, the TAs were surprised when a class spokesperson articulated class apprehensions and their insistence on the inappropriateness of the task.

Initially the students were informed that as a mandatory part of the curriculum, failure to conduct the exam would result in an incomplete grade for the module. The unprecedented scenario put the university administration on its back foot forcing it to step out of its universalistic paradigm and to face the cultural particularities and nuances of beliefs within Qatari culture. This involved course administrators corresponding with the imam directly. In so doing, American faculty members came to understand "what was locally at stake" (Kleinman 1999: 70). In the end, Cornell revised its stance and in the end permitted a female student to observe rather than perform the male examination. Faculty members, aware of both the sensitive nature of these exams and the potential benefits accrued through the learning experience, thoroughly reviewed the training concluding that, "We've not had to make any adjustment. There was nothing inappropriate and we leave nothing out." Yet, during the year I observed, I detected subtle adjustments that been made which seemed to consider the local social setting. Students in NY are not chaperoned by a faculty member nor are the small groups segregated by sex for these exams as they are in Qatar.

Contrasting the situation in the Gulf, the absence of rigorous social constraints in the US allows for the routine use of bodies as teaching props in medical education. The key aspect is that from a secular point of view one is able to objectify the body so a demonstrator like a SP, a GTA or a UTA is able to permit a student-practitioner to have access to his/her body (e.g. rectum) without interpreting the action being performed as being demeaning or undignified, but rather as educational and essential. Although the process of viewing bodies as clinical objects has been well documented and requires adjustments for all students (Sinclair 1997; Langone 1995; Good and

DeVecchio Good 1993; Becker et al. 1961), it appears Muslim students struggle to a certain extent, with the plurality of Muslim bodies in particular, for a host of reasons. How the body is seen, experienced and understood, is largely determined both by one's position (gender, age, status) and one's context. Medical students, doctors, patients and members of the public all engage with the body in a different manner so each perceives the body in a unique way. Further, cultural attitudes towards, and beliefs about the sanctity of the body, how it can be used and who has legitimate access to it vary from the US social context to that found in the Gulf.

The absence of Arabic

Several foreign English-medium universities operate campuses in the predominantly non-English speaking nation of Qatar. Although the national university, Qatar University, is an Arabic-medium campus, the state sought to recruit English-speaking tertiary institutions as it changed its orientation from a national to a global perspective. Unlike Arabic, English operates as the *lingua franca* of science and is the “preferred speech of university managers seeking to make the most of a global knowledge market” (Tange 2011: 1). Within the domain of Education City, the pre-eminence and legitimisation of the foreign language serves as an example of Bourdieu's (1991) “linguistic normalisation” whereby English functions as the dominant mode of communication within the new educational zone. The consequence of student engagement with this non-indigenous *lingua franca* and its perceived impact on identity is explored in more detail in the following chapter. In an effort to ensure that English is firmly embedded as the dominant discourse within the organisational setting, WCMC-Q faculty actively discourage the speaking of Arabic within classrooms, laboratories and clinical settings (whereas, be it a form of institutional resistance or merely native speaker camaraderie, some administrative support staff in Student Affairs tend to converse with students in Arabic). Even though it is not the “national” language, nor does it command official language status in the state, fluency in English, and American English to be exact, is a prerequisite for any Qataris wishing to participate in the nation's modernising project. QF's

ubiquitous claim to be preparing its citizenry “to meet the challenges of an ever-changing world” seems to include the adoption of English in order to participate in global discourse.

There are a number of reasons that English is used as the primary language of instruction at the new colleges in Qatar. First amongst these is the pre-eminence of English in the global knowledge economy and its near exclusive use in the domain of scientific research (e.g. journals, conferences, textbooks). Second, it is the functional language of the experts and institutions that have been brought in to fulfil the nation’s bid to transform itself into a knowledge-based economy. Admission to the college is restricted to those who have demonstrated linguistic competence via the measure of TOEFL tests. That the vast majority of Qatari students attending the college have been reared in the urban centre of Doha may be indicative of a number of structural realities that are linked to the distribution and access of English-medium schools throughout the country.

Despite the claim of several government high schools that they teach science in English, according to the students themselves, the reality is that only the texts, tests and terminology employ the discipline’s *lingua franca* (I began to refer to this commonplace phenomenon as the “3 Ts”). Having initially taken TOEFL scores at face value, Cornell’s institutional assumptions concerning both language proficiency and familiarity with American culture are pervasive. TOEFL tests (which are rife with culturally bounded knowledge) and their all-important scores are perhaps not an accurate measure of language proficiency. For instance, one extremely confident and articulate pre-med student complained to me that her recent TOEFL score was an inadequate measure of her English language comprehension. She inferred that the reading comprehension section was culturally biased as the passage discussed the genre of American jazz music. Consistent with the fact that amongst some devout Muslims music is considered to be *haram* (unlawful), the student maintained that she had no working knowledge, understanding or functional vocabulary (e.g. rhythm, tone) to aid her comprehension. Another student who had grown up in the desert

said that he found the comprehension passage that dealt with rainforests in particular, “difficult to get his head around.” Both faculty and students contend that personal interviews (i.e. face-to-face/co-presence) prove to be a more effective assessment tool, which is why personal interviews are an integral and mandatory part of the admissions process.

While Arabic-speaking students seem to take the normalisation of English as a given and do not appear to be concerned with issues such as linguistic imperialism, those educated in Arabic-medium schools frequently comment on the added temporal and social burdens of studying in a language other than their native tongue:

I didn't have the time to grab [absorb] the ideas of different things. It took me three times as long as other people to read one biology chapter. It took me about six hours...I was always studying in my room away from my family (2nd year Medical Program, Qatari).

Social and academic isolation accompanies a student's inability to communicate confidently in English during the Pre-medical stage of the programme:

Coming from an Arabic-medium school, the whole thing is so just so different. The first week in Cornell was so tough. Around half of the class were from Arabic-medium schools. They are the ones who found it difficult. The other people they were really satisfied. They were having fun and finding it easy. They all got 3.5 and above. So many people who got 4 were from English-medium schools. The first year was a walk over for people who were in either the American school or the British system or whatever. The way it's taught in the schools, the curriculum itself, everything is different. So basically it [had] to do with language. In biology where there was a lot of written stuff, that was very difficult at the beginning. I didn't do it, but I saw people translating the first month, the first semester, literally translating from English to Arabic. I thought, let's struggle the first semester or second semester and then maybe it will be easier. Eventually it was. I mean if you work hard, you get there. So it was tough. At the beginning I was not interacting at all. I was silent for the whole first semester. I remember in the English class the professor called me [in] because I wasn't interactive. I should discuss more. Coming from an Arabic-medium school, you really need two to three years to adjust. The way the curriculum prepares you in Arabic school is just nothing. In English

it's nothing. You get zero [preparation], really (2nd year Medical Program, male).

Along the same vein:

I struggled socially, yes. I did in the first year actually because of the language barrier. I was like... I was like hibernating, just sitting in the corner of the class trying to absorb this new language. I wasn't very social, I only socialised with Arab students at the beginning... Some people thought I was mute at the beginning. I was really passive, just receiving. I was not sending [contributing] anything (1st year Medical Program, male).

Similarly, when asked about the greatest challenges facing Arabic-trained WCMC-Q students, faculty members invariably cite language as the key obstacle to success in the Medical Program. Below one dean explains:

English, English, English! I think there's definitely no question, it's English language. I mean, I've been watching how it drags on with them when they come to us [the Medical Program]. We actually did do some testing for the current students in the Foundation Year. They read at an 8th grade level and yet we expect them to get into school, take all these courses, be able to read such a huge amount of information *and* understand it. So, I think that the language by itself is such a big barrier for them. The issue of them learning to memorise as opposed to understand in schools of course, we see some of that, but I think that is very quickly reversed as opposed to bringing them up [to speed] with their language. We notice that they're very creative students and very intelligent, so when you talk with them about how to approach a problem, they're able to do it, but then their language is in the way and it takes a long time. One year does not seem enough to be able to read all the information because they have to read it and translate it into Arabic in order to understand it, and then they translate it back into English. And to try to do that when you have such a huge amount of information, it just does not work. So it's English, problems number 1, 2, and 3. That's the biggest challenge.

Some English-speaking faculty members justify their low tolerance of spoken Arabic in the academic sphere on the basis that they only have a limited period to adequately prepare each cohort of medical students for success in the programme, including the ability to pass American exams. Full immersion in an English-medium curriculum is

regarded as pivotal to success. The viability and long-term success of Cornell's medical programme in the region ultimately depends on the institution's ability to provide the same calibre of education to students located in the Gulf.

Programme convergence and divergence

Much media speculation – particularly on web-forums and in newspapers – has revolved around the issue of authenticity and validity of the “pseudo-American” medical certification available in Qatar. According to the former Director of Planning, therefore, “it's critical, in order for Cornell to feel comfortable in awarding a Cornell degree, which has a long reputation of excellence, to ensure that any graduate who holds that degree has met certain standards. Maintenance of standards goes from the time of admission all the way through the Program to graduation” (Ismail 2004: 4). The dean of WCMC-Q reiterates this point, affirming that, “it is a fundamental principle that we do everything as closely as possible to the way it is done in New York” (Ismail 2004: 2). Ultimately what is at stake for Cornell University is the credibility of its brand. It is essential, therefore, for the college to continue to produce high calibre physicians, regardless of location; the consequence of any perceived drop in degree standards would compromise the long-standing Cornell brand.

According to one WCMC-Q professor, the attempt to produce a “carbon copy” of the medical training results in both campuses trying:

...to an amazingly annoying degree to make the classroom experience exactly the same...and in this they are successful – but sometimes to the detriment of the Qatari programme – in bending over backwards to ensure that they are using the same materials, identical American examples, listening to the same lectures, following the same curriculum and successfully sitting the same academic and clinical exams.

In spite of WCMC-Q's valiant attempts to provide the same Medical Program on offer in NY, the dean acknowledges that the six-year integrated programme “has

been specially designed for students in the region, and represents a departure from the more normal eight-year program offered in the US” (WCMC-Q 2005: 2). The phrases “specially designed” and “departure from” belie claims of institutional mimicry expounded in promotional documents used to recruit students in the Gulf region. Unlike their peers in NYC who have generally obtained four-year undergraduate degrees before gaining admission into medical school, students in Qatar undertake an intensive, condensed two-year Pre-medical Program uniquely designed to prepare the Gulf cohort of students to meet the prerequisites of the Medical Program.⁸⁰ The decision to offer an accelerated and integrated programme was imposed upon Cornell by QF, which concedes that its Board of Directors initially thought seven years was too long and that a six-year model was more suitable on the basis that it was in alignment with medical programmes currently available in Bahrain, Saudi Arabia and the UK. The compressed six-year format of the WCMC-Q programme thus intensifies pressures to absorb foreign language materials and lessons quickly. Hampered initially by their limited command of English, conversations with students educated at Arabic-medium schools recurrently spoke of the articulations existing between language and time.⁸¹

Presence of a temporal community

Cornell’s dual-sited medical training package, albeit limited in geographical scope compared to the global financial markets studied by Knorr-Cetina and Bruegger shares some parallels in that both comprise:

...fields in which participants, although geographically distant, are oriented... toward one another and, at the same time, disengaged from local settings [and] are spanned and bound together by global [in Cornell’s case,

⁸⁰ The average age of students entering WCMC-Q is 21 years as compared to 25 years for the WCMC-NY students (pers. comm.). The age disparity reflects the fact that WCMC-Q students tend to enter the contracted Pre-medical Program directly out of high school.

⁸¹ My advisor likened the increased difficulty of undertaking an Ivy league medical education in a second language to the relative difficulties encountered by a famous dancing duo, “compared to the NY students the WCMC-Q students are faced with the same level of challenge as Ginger Rogers – she had to do everything Fred Astaire did but did it backwards and in high heels. And like Ginger, they seem to be doing a damn good (and graceful) job!”

transnational] microstructures – that is, patterns of relatedness and coordination that are global [transnational] in scope but microsocial in character and that assemble and link global [transnational] domains (2002: 907).

That said, the Doha-based participants, engaged as they are in a medical training programme originally designed for use in America, are more obviously oriented toward those in the West, appearing at times to be more disengaged from their immediate setting. Grounded as it is in two geographically distinct campuses, the collective institutional arrangement is articulated via a series of coordinated processes and interactions, generating a pedagogical form that is “not nationally bound” and has the capacity to function in “fields of interaction that stretch across time zones” (Knorr-Cetina and Bruegger 2002: 909). In order to facilitate the logistics of an integrated teaching programme for instance, it has been necessary to “phase shift” or delay the programme in Qatar by a period of two weeks in order to synchronise the teaching at WCMC-NY and WCMC-Q as well as to coordinate the transfer of lectures, course materials, exams and faculty between the two campuses.

The transnational medical school is an example of a community of time wherein participants’ “identities [are] based on interlocking time dimensions and the observation of [in our case, engagement with] a common object [i.e. the medical programme]” (Knorr Cetina and Bruegger 2002: 920). In the absence of spatial immediacy, temporal coordination is central to overcoming the geographic gulf and for facilitating smooth delivery of Cornell’s medical programme. Temporal communities involve the synchronisation of calendars and schedules enabling dispersed participants either to engage contemporaneously with the joint curriculum, or share sequentially the limited pool of expertise. Boden and Molotch point out that in the absence of co-presence, people and organisations seek out “...more personal forms of communication [which] have consequences for how individuals structure their daily calendar and how human activity is organized geographically” (1994: 258). Where possible, the organisation of Cornell’s academic calendar integrates face-to-face communication between campuses, corroborating this observation.

In the absence of co-presence, however, a shared academic calendar has the benefit of “[creating] an atmosphere of collective anticipation and preparation for specific events that pace and interrupt the regular flow of [educational] activities” (Knorr Cetina and Bruegger 2002: 930). That dispersed participants are subject to a timetable punctuated with the same academic and professional exams, residency interviews and application deadlines, demonstrates how transnational orientation toward, and experience of the shared medical programme is achieved through synchronised and collective experiences. Though angst-ridden, these communal episodes function as veritable centring mechanisms, having the effect of anchoring the student body and the disembodied training package in shared visceral experiences.

Scheduling across transnational boundaries is no small feat when one considers the complexities involved. Creating opportunities for co-presence demands a high degree of flexibility and commitment from both parties:

...[requiring] participants to set aside not only a specific time but also a shared space [be it a physical or a virtual venue], as well as generally constraining other activities at the same moment or location...it must be precisely located in time and space, committing all concerned to rather singular dedication of body and mind (Boden and Molotch 1994: 263).

Yet, the normative temporality of clock and calendar in operation at WCMC-Q is one associated with Western modernity where the arrangement of the timetable is geared as much as possible to conform to the NY “normality” of working hours and holidays. Due to daylight savings time (in effect in the US, but not Qatar), at varying points in the year there is either a seven-hour or eight-hour time difference between the two campuses. Time differences restrict the flexibility of the programme because only a limited number of hours during the day are regarded as feasible for LVCs. Thus, time constraints ultimately shape the structure of the academic programme, requiring the combined use of recorded and live modes of information exchange. For instance, in order to accommodate live interactive sessions WCMC-Q students

attend lectures until late in the afternoon whereas their NY peers conclude classes by 1 pm every day. In the event of a scheduling change, invariably, the WCMC-Q student body is inconvenienced and required to accommodate the needs of the NY campus.

Scheduling is also complicated by the fact that both campuses function according to different working weeks (i.e. Sunday to Thursday in Qatar; Monday to Friday in the US). Essentially, communication between the Qatari campus and the “mother ship” (administrative phraseology) is limited to a restricted window of opportunity from Monday to Thursday between the hours of 7am and 9am EST (3pm to 5pm in Qatar). While the programme is based ostensibly on the US semester system, scheduling complications in the academic calendar are compounded during religious festivals such as the Holy month of Ramadan and Judeo-Christian and American vacations. Concurrent use of the lunar Hijri calendar (*at-taqwim al-hijri*) and the Gregorian calendar also means that different religious, public and federal holidays are incorporated into their respective academic schedules (i.e. Eid al-Fitr; Eid al-Adha; Qatar Ascension Day, Ramadan, US Independence Day, Thanksgiving, Christmas, Martin Luther King Jr. Day, New Year’s Day, Easter Sunday).

Presence of foreign pedagogical techniques

The transplantation of a US medical school makes the knowledge at the core “American”. This has specific pedagogical implications in terms of what knowledge is incorporated and how it is organised within the curriculum. Naturally, American paradigms of teaching, learning and assessment prevail at the college including strategies such as PBL, the use of SPs and educational rubrics. Bleakley, a professor of medical education, predicts that such educational imperatives will gradually become “‘essential’ and unquestioned parts of the curriculum [and]...as this tendency becomes widespread throughout medical education, these key aspects of the Western curriculum will become, like the Big Mac, ubiquitously present – homogenised, commodified, marketed, reduced to ‘essentials’ and instrumentalised” (2008: 268).

American accreditation bodies do not perceive indigenous medical schools as being up to standard if they do not readily incorporate “the latest learning approaches engineered in the metropolitan West” (Bleakley et al. 2008: 269). Therefore, pedagogical techniques such as outcome based learning and Objective Structured Clinical Examinations – developed and trialled in North America – have become veritable benchmarks of progressive and high quality medical training programmes.

The propensity to conform to Western standards has recently been demonstrated in Japan where Western curricular innovations have been implemented in a bid to reform and restructure the *ikyoku-koza* (guild like affiliation) system of medical education (Onishi and Yoshida 2004). Despite being readily taken up by medical schools the world over, however, the applicability of these pedagogical techniques for students located in different cultures is rarely questioned and the implementation of these teaching methods “is only made possible through intense re-socialisation of learners (into metropolitan Western mindsets, at the expense of alternative views)” (Bleakley et al. 2008: 269). For many students educated outside of the West, inquiry-based learning and critical thinking are not only alien concepts but also run counter to academic behaviours extolled in their indigenous educational systems.⁸² For instance, students who graduate from Arabic-medium high schools and who achieve the requisite grades to be accepted at Cornell more often than not enter the American institution with long-standing culturally programmed academic habits.

Fortunately, the implementation of the Foundation Program and the Pre-medical Program give students from differing educational backgrounds some additional time to acclimatise to many of the structural issues and expectations encountered within

⁸² One Arabic-educated physician who practised as a physician in North America points out that in the West students are expected to display confidence and articulate their observations and opinions from a very young age, citing the ubiquitous practise of “show-and-tell” from kindergarten onwards. She explains, “We do not have show-and-tell in the Arab world. This concept is foreign to us. At school we are rewarded for doing as we are told and listening to the teacher.” Her simple observation is consistent with comparative educational journals that highlight differences in cross-cultural primary education.

the college environment.⁸³ It is important to recognise however, that the students who *do* advance into the Medical Program are the ones that successfully negotiate these hurdles within the short timeframe made available to them. It may even be the case that the selection committee, cognisant of its brand and reputation, is even more cautious in its selection of WCMC-Q candidates in order to ensure that anyone who is accepted into the nascent programme will be able to complete it successfully. Thus, the calibre of WCMC-Q students entering the Medical Program is outstanding.

Contravening prevailing stereotypes which depict Arab students as passive learners, a number of professors rate WCMC-Q students as “more interactive”; “more committed”; “more ambitious”; “more mature” and “as good as, if not better” than their NY counterparts. These comments may reflect the fact that most students arriving at Cornell who were educated in Arabic-medium schools progressed through a science stream (secondary education curriculum that concentrates on scientific subjects, resulting in less exposure to the humanities or social sciences). For most, entry to the Medical Program is based on a cumulative grade point average attained in the Pre-medical Program, which is weighted heavily in quantitative subjects such as maths and sciences.

Medical students reared in Arabic-medium schools often speak retrospectively about the challenges they had to overcome during the Pre-medical Program and the impact that such experiences had on their relationship towards the institution itself.

Enrolment in one of Cornell’s bridge programmes – be it the Foundation Program or the Pre-medical Program – necessitates many adjustments and is thus a period marked by tremendous stress. While they acknowledge their successes, many students speak at length about vestigial academic behaviours not readily discarded (e.g. rote memorisation, reluctance to pose probing questions). In a discussion about the discontinuities encountered in the American academic setting a student said, “I

⁸³ The curriculum committee had considered extending the Pre-medical Program to three years in order to accommodate the needs of decelerated students. Instead, in 2011, WCMC-Q announced a collaborative programme with Carnegie Mellon University in Qatar allowing decelerated students from Cornell’s Pre-medical Program to complete an additional two years at Carnegie Mellon where they will obtain a BSc in Biology with the option of then reapplying to the Medical Program.

was a receiver, not a producer. I'm having to change the way that I am programmed." Just as one might reprogram a computer, the reprogramming metaphor communicates the marked shifts experienced by students as their modes of learning and study strategies are overhauled.

Alluded to in my earlier discussion of organ rejection, the problem of Arabic-schooled students' poor academic performance during the Pre-medical Program is becoming more serious as increasing numbers of these students are being actively recruited into WCMC-Q in a bid to increase Qatari quotas. It is after all, a college designed first and foremost for Qatari nationals. A review of how socio-cultural factors converge, or diverge with Cornell's institutional expectations and practices is central to an understanding of how these non-American students respond to the transplanted pedagogical programme.

The absence of an American-style academic habitus

An important factor to consider in any transnational educational project is whether the students entering the system are familiar with the academic culture of the foreign institution. Students from governmental schools report that they consider themselves to be less adequately prepared for the academic culture of the institution than their peers. An interview with one of my Arabic-educated informants illustrates some of the variances encountered from the onset:

Before I came to Cornell, I didn't own a computer. I didn't know how to type and I didn't know what "Googling" was.⁸⁴ I didn't even know how to operate a mobile phone...I would love to see my application because it was the first time I had to fill in a form like that and I couldn't speak English very well. Like, I didn't know what to put for my last name and same with

⁸⁴ Though few in number (and thereby the exception and not the rule), some students originate from areas afflicted by war and do not have access to reliable sources of electricity, much less monetary or physical access to personal computers with dependable Internet connections.

my address, it doesn't work the same where I come from.⁸⁵ Like, did playing soccer in the street with my friends count as an activity? I didn't know what they meant by [the phrase] parents' alma mater. Then when I asked my head teacher for a reference letter⁸⁶ he refused because he didn't know what that was...Before I applied to Cornell I had never heard of SATs or MCATs.⁸⁷

Hamad's recollection of the confusion he incurred during the initial phase of the application process provides a glimpse into what he was about to encounter upon his acceptance and enrolment at the American medical college.

Cornell – complete with its global contacts, English-medium textbooks and Western-educated faculty – has implemented what seem to some students to be foreign “Western” frameworks, procedures and pedagogical strategies. This is compounded by the fact that students, particularly those educated in Arabic-medium high schools, arrive at college equipped with different skill sets and do not necessarily immediately identify with the academic norms and values embedded within the American collegiate environment.

Different schooling systems accord different curricular and pedagogical emphasis thus fostering the acquisition of different skills. Arabic schooling is markedly different from that found in English-medium schools. Unfortunately, however, there is a scarcity of ethnographic studies in academic settings in this part of the world. There exists a strongly rooted “culture of academe” at Cornell because of its Ivy-

⁸⁵ Arabic names do not correspond to the data-entry field labels on the application to medical college. Similarly, the convention of writing one's formal address with a street name, house number and a postal code is not found in Qatar or several other countries like Iraq.

⁸⁶ Until recently, instead of receiving reference letters commenting on prospective students' academic abilities and achievements, Cornell was receiving letters commenting on student morality and behaviour. Cornell found it necessary to provide a template in the form of a downloadable reference form complete with guidance outlining what a one-page recommendation letter should entail.

⁸⁷ This contrasts their American counterparts who will have been learning how to sit standardised tests such as the SAT from an early stage in their education.

league status.⁸⁸ Pre-medical students whose high schools were internationally oriented had the benefit of being exposed to a college-preparatory curriculum (e.g. International Baccalaureate) that equips them with the requisite “cognitive, psycho-emotional, socio-cultural and ethical predispositions” for success in an American university (Resnick 2008: 8). On the other hand, students arriving from the more parochial Qatari state schools – whose strict national curriculum, delivered in Arabic, focuses on preserving national identity, the promotion of Islamic values and concentrates on either science or literature – are less prepared (Arabic-medium community schools which follow other national curricula such as Egyptian schools share many parallels with the Qatari governmental schools). Rote memorisation is rife, having had teachers who focus on the dissemination of factual knowledge as opposed to the inquiry-based model found at Cornell.

Students have a tendency to defer to their teachers’ authority on the basis that questioning is tantamount to disrespect. Similarly, written text is taken at face value rather than queried. Occasionally Western academics new to the region demonstrate a tendency to misinterpret Arabic-schooled students’ behaviour as passive, lazy and lacking in commitment to their studies. Similar to the Japanese situation documented by the medical professor Rao, the perceived passivity of Arab students is culturally determined and is “inextricably linked to an extremely formal and didactic educational system, which is, from the (onset), one-way and passive, rather than two-way and interactive, and discourages non-conformity” (Rao 2006: 44). The Qatari system produces students who are seemingly less confident and unfamiliar with the culture of academia found in Western institutions (e.g. study initiated by learner, discovery guided by faculty rather than informed, interrogation of texts) and who are initially bereft of the essential study skills, critical thinking skills and the ability to apply their knowledge in an authentic manner, upon which success in US tertiary

⁸⁸ Originally, the term Ivy League was used to identify an elite group of colleges that comprised an athletic conference. WCMC-Q stresses its “Ivy league” status in much of its promotional literature, yet, when polled, the vast majority of students arriving from governmental schools admitted ignorance of the term prior to admission to the college. Most opted to study at Cornell because it was an American medical school and only came to understand the phrase’s connotations of academic excellence after enrolment.

education is contingent. For instance, the majority of students educated in Arabic-medium schools claim that they had no previous experience of designing and conducting experiments, delivering presentations, completing multiple choice examinations, or writing essays and research papers. Further, pupils who attended poorly resourced governmental schools report having limited access to proper lab equipment and computing facilities.⁸⁹ Responding to my question about whether or not he had any prior knowledge of the scientific method, one student offers this response:

If you mean by memorising what the scientific method includes, yes, but we never devised our own experiments. It was theoretical, not practical...Over there [in high school] it was a very warm environment and we learned morals but now I am having to practise what I've studied.

The absence of these specific skills sets means that many of the students initially struggle with a medical “curriculum that emphasizes active learning, self-directed inquiry, small groups rather than lectures...and active and creative partnership between students and faculty” (Weill Cornell 2010). The use of PBL tutorials has been widely adopted in medical schools around the world, suggesting that it is universally considered the ideal model for medical education.⁹⁰ For students educated in Arabic-medium schools, however, the learning environment associated with PBL is fundamentally different from their prior learning experiences.⁹¹

Academic difficulties associated with entering Cornell's Pre-medical Program include: having incompatible linguistic and academic skill sets and being unacquainted with the academic norms (e.g. academic honesty, grading

⁸⁹ The recent overhaul of the Qatari schooling system has been accompanied by financial investment aimed at refurbishing schools. The students that I worked with were not beneficiaries of these revamped facilities.

⁹⁰ Though beyond the scope of my study, it will be interesting to see how the recent shift to EBM as the preferred model for practice (with its emphasis on statistics and randomised control trials versus other forms of evidence such as clinical case studies) will impact upon the ideals of PBL as a pedagogical strategy.

⁹¹ For a parallel situation in Japan, see R. Imafuku (2011).

expectations). Many of the academic behaviours exhibited by Arab-educated students are deeply entrenched and little time is afforded for these necessary academic shifts (several students maintain that if they had not got to grips with the new pedagogy in the first year of the Pre-medical Program that it would have been too late). In some cases, students experience “a crisis of confidence” which tends to impede integration into the institution’s academic and social communities during the initial stages of their studies.

With seventy percent of the Arabic-schooled students not having a legacy of doctors in their immediate families, few know what to expect, so what they do encounter is often foreign to them both in terms of content and approach. While it should be acknowledged that the cognitive transition from secondary education into tertiary education is difficult for all students, those arriving from Arabic-medium schools seem to report more discontinuities.

Absent bodies of knowledge

Throughout the duration of my fieldwork, I documented innumerable examples of cultural dissonance as students reared in the Arab and Islamic environment engaged with the transplanted curriculum. The following excerpt provides a comprehensive example of how a mundane curricular document becomes subject to multiple interpretations when read in a different social context:

The first page of the PBL case, entitled “Mr. Tussis’ Persistent Cough”, gives a brief synopsis of a fictional Mr. Tussis, a patient who presents with a productive cough...Part II reveals more information about the patient’s social history adding what appear to be straightforward titbits of pertinent information used to contextualise the case. We know that Mr. Tussis is a former fashion designer and a Vietnam War Veteran, having toured both Vietnam and Thailand. He frequents bars with homeless people and on the final page, we are told that he has formed “close relations with one of his

fellow AA members”. When the reader stops reading aloud, I am intrigued when students pose two questions: “What’s a veteran?” and “What’s AA?” When students start to suggest medical differentials, a male student suggests that perhaps the patient was suffering from depression. A girl dressed in a colourful hijab immediately interjects and dismisses his idea, referring directly to the text, “He can’t be depressed, he went on a holiday. It says in the case that he toured Thailand and Vietnam.” The case is inundated with culturally bounded knowledge.

In most Arabic high schools, students graduate having pursued a streamed course of study that concentrates on either literature or science. Not surprisingly, most medical students arrive having focused on the latter. Few students born in the Gulf in the late 1980s are familiar with the term “Vietnam war veteran”, much less able to conjure up the image that the term connotes. Simple contracted phrases like *tour*, instead of *tour of duty*, are easily misconstrued as evidenced by the young woman’s comment. That Alcoholics Anonymous is referred to from the outset by its abbreviation without explanation is a prime example of what I term a “knowledge gap”. For most Westerners, the AA abbreviation is immediately associated with the “Twelve Step” programme designed to support recovering alcoholics, where the addict is paired with a sponsor *et cetera*. While students in the Gulf quickly come to understand what the letters stand for, some may not fully comprehend the nature of the self-help programme aimed to support sobriety. When probed after this particular session, few of the students raised in the strict Wahabi Muslim-majority nation – with little or no exposure to alcoholism – were able to tell me much beyond what the letters denote. It was occasionally apparent that some students overlooked crucial pathological clues geared to direct student inquiry because the scenarios transcended their life experiences and social terrains. Similarly, the plight of homeless North Americans, forced to seek shelter in small, cramped quarters, seems foreign in a landscape strewn with expansive villas, a per capita GDP that ranks amongst the highest in the world and a nation where the family unit prevails.

Absent administration bodies

Just as students come to each campus equipped with different knowledges based on their respective frames of reference, the same is true of accreditation bodies that inform the respective branches of the academic institution. The state of Qatar is entirely dependent on foreign medical authorities for accreditation of its graduates. Aside from membership in the Arab Board of Medical Specialisations, which currently accredits training programmes and grants postgraduate board certificates in the GCC, Qatar does not have any indigenous medical accreditation bodies.^{92 93} The RAND-Qatar Policy Institute, an organisation closely associated with educational and health care reform in Qatar, points out that, “one way to recognize programs for quality is through accreditation from internationally recognized organizations” (RAND 2005: 90). In conferring accreditation, organisations working internationally are in a position to set benchmarks against which individual organisations can be measured. When Qatar’s HMC attained accreditation from Joint Commission International (JCI), an internationally recognised accreditation body that benchmarks hospital performance, it effectively aligned the indigenous medical system with a set of world-class standards for hospitals and medical best practices.

Like their American peers, WCMC-Q students are expected to sit US medical licensing board examinations throughout the duration of their training, demonstrating their ability to apply their clinical knowledge and skills safely and their capacity to perform to the high objective standards in operation in the US (USMLE 1996). Thus, the absence of indigenous accreditation bodies is overcome through WCMC-Q’s links to supranational organisations and professional associations, accrued by

⁹² It is noteworthy that one of the explicit functions of the aforementioned board is “to promote the use of Arabic language in medical education” (Arab Board of Medical Specializations 2008). The primacy of Arabic language in Qatari clinical settings and its professional implications will be addressed in Chapter seven.

⁹³ A new medical council known as the GCC Council for Health Specialisations is due to replace the Arab Medical Board. The President of the Council, Dr. Abdulatif Al Khal states that “the aim is to raise the quality of specialisation schemes for junior doctors to match that seen in the West”. Its remit is to reorganise and standardise medical training in the participating states and elevate standards to match international benchmarks (Bladd 2008).

virtue of its institutional connection to Cornell in NY. These affiliations provide yet another example of how Qatar's domestic medical school and local health care system is constantly being shaped and influenced by absent others.

Technical encounters and institutional intimacy

The transnational model of educational exchange employed at Cornell effects a situation of "institutional" intimacy – with intimacy referring to the emergent "functional relationship between people who regularly work together or exchange resources whether in equal or hierarchical relations" (Bray 2008: 155). Cornell's institutional set up – where the "mother ship" shares its medical programme with a branch campus – engenders a hierarchical relationship between the metropole and the periphery. The flow of goods, processes and expertise tends, at least at this early stage, to be largely unidirectional, moving from the metropolitan campus to the one in the desert. The highly delineated curricular import – programmed as it is to deliver specific outcomes and achieve certain competencies – becomes an object of surveillance in order to ensure that academic and professional standards remain intact during the institutional transfer.

Institutional relationships are mobilised in order to facilitate delivery and monitoring of the curriculum, the exchange of materials and the sharing of expertise. To this end, individuals at WCMC-NY and WCMC-Q are in frequent contact (be it electronically, by telephone, or in person) with each other, coordinating the aforementioned processes during which an intimacy is formed between the actors in the different work sites. The scenario commands "an interdependence, an intertwining of human lives and experiences, [and is] replete with the tensions, contradictions and imbalances of power typical of any form of reciprocity" (Bray 2008: 151). Outfitted with an array of communications technologies, both sites have the capacity to transcend physical boundaries associated with laboratories (virtual microscopy), libraries (e-distributed "library without walls"), clinical examination rooms (surveillance hardware) and classrooms (video-streaming and conferencing

technology). Faculty physically located in NY can simultaneously be seen in Doha; entire classes seated in Lecture Hall 4 can be made visible to the absent professor; a student in Doha can access the exact same microscopic slide at the same time as his/her NY peer. Obviating the need to physically move in space, rapid satellite and cable links allow staff and students to teach/study “at locations far beyond their immediate horizon” (Aneesh 2006: 1). In effect, virtual education is organised in such a way that students could conceivably attend an overseas medical school, without actually going abroad. To be sure, the disembodied faculty, staff and student population adds a different dimension to conventional understandings of medical education wherein the transfer of skills does not necessary entail a migration of bodies to one specific site.



Figure 9. Virtual microscopy enables students on both campuses to use an identical slide collection of microscopic specimens. Photo: Martin Marion

The harnessing of advanced technologies for the provision and advancement of domestic medical education based on a US prototype demonstrates a trajectory of modernity being pursued in Qatar. Yet, this transnational educational prototype is scaffolded on overlapping “local, national and transnational frameworks of regulation, of ideology and legitimation and...material infrastructure and

technological resources” (Bray 2008: 154).⁹⁴ The dual-sited nature of the project means that Qatar and America’s respective local, national and transnational imperatives constitute factors that shape the educational transplant.

Endowed by the state with the latest technological accoutrements, Cornell utilises this material infrastructure and hardware for a broad spectrum of administrative, pedagogical and clinical activities, including the creation of virtual communities that make the absent present, and the use of medical technologies to make the invisible visible. The prolific use of ICT is what allows the dual-sited campus to share one library, one faculty, a single curriculum, one set of pedagogical resources and form one virtual community bound together under a shared Cornellian identity (even though many of the actors never actually come into physical contact with each other).⁹⁵

The institution presumes computer literacy *a priori*, so students arriving at Cornell are immediately immersed in the technologically rich environment, issued as they are with passwords and personalised email addresses. American students serve as the institution’s point of reference from which these assumptions of normative technical practice spring. Students and faculty situated in the US take for granted that they have “reliable, integrated infrastructure and [a] high-level of uptake of modern technologies in the home, the office, the factory and the school, [which] has normalised the consumption of industrial goods” (Bray 2008: 157). This stands in stark contrast to the student body located in Qatar, where “reliable and integrated

⁹⁴ The President of Cornell University received a letter from the Chairman of the International Relations Committee (Congress of the US House of Representatives) commending Cornell’s consideration of establishing a medical college in Qatar. In addition to citing the valuable links that such an educational programme would generate, Qatar’s strategic role in America’s security interests was also highlighted.

⁹⁵ For other examples of how the use of ICT transcends conventional social networks and generates bonds between individuals previously unconnected see Turkle 1996; Castells 1997 and Bray 2008.

technological infrastructure” has only recently become an urban reality.⁹⁶ Thus, technological choices and practices implemented at Cornell contain inherent assumptions regarding computer accessibility and literacy in the Arab world, especially on part of its incoming students. A few students from Iraq in particular, mentioned that before their arrival at Cornell, they did not own mobile phones, nor did some of them have computers at home.⁹⁷ These students did not know what “Googling” *was*; much less know how to do it. Nor were they familiar with accessing on-line teaching resources, conducting web searches, word processing or completing on-line applications. Domestic students educated in governmental schools located outside of Doha also complained that their schools possessed few computers.

Mechanisms facilitating inter-communication and peer-bonding

As well as facilitating pedagogical and administrative exchanges, ICT plays an important role in the facilitation of communication between campuses and peer bonding that occurs within the closed institutional community. That technology allows student interactions to remain private and largely unscrutinised make these modes of interfacing appealing to the student body.

Facebook

In addition to the application of technology for academic and administrative means, WCMC-Q students are also embedded in different cultures of communication and

⁹⁶ Despite being a late entrant and “having made its first serious moves only in 2005”, Qatar’s technological transformation has been so great that the nation is now ranked 32nd most networked economy in the 2007-2008 Networked Readiness Index (Al Jaber and Dutta 2008: 133). It is significant that Qatar’s ICT progress outpaces most of the Arab world, where many of the incumbent students come from.

⁹⁷ Even when access to the hardware was available to Iraqi students, occasional power shortages hindered use of computers as a viable day-to-day resource.

entertainment (e.g. Facebook, You Tube, use of emoticons,⁹⁸ downloading medical dramas such as House and Grey's Anatomy) that depend on the same technology. Access to the Internet – be it from one's wireless computer connection during a lecture, between classes at one of the computer pods located throughout the North and South corridors, remote access from the dormitories or whilst stationed at HMC or in NYPH during subinternships or electives – constitutes an integral mode of social communication between students (particularly of the opposite sex) in the coeducational and Islamic setting.

The prolific use of Facebook at the medical college promotes a form of social bonding. It is a global social networking website which facilitates the exchange of messages and personal information using personal profiles. Students' peripatetic existence (be it movement from campus to local clinical sites or between Doha and NY) makes Facebook an important facet of student culture for the vast majority of



Figure 10. Computer pod. Photo Martin Marion

⁹⁸ An emoticon is a pictorial facial expression depicted by a combinations of letters and punctuation (e.g. :D means happy; :P represents disgust; :-(conveys unhappiness).

the student population. A student alludes to the social importance of Facebook in a status update⁹⁹: “Student X is post-call, and socializing – yes 90% of my social life happens on Facebook.” One student helpfully advised me that if I really wanted to see what he and his peers were interested in and what they talk about outside of the classroom, that I would be wise to activate a Facebook account and set up my own personal profile. I promptly did just that, thereby initiating a reciprocal exchange of information about our respective private worlds. Each Facebook member has a personal profile upon which he/she can add links, photos, groups, lists of personal interests, and messages that can be shared publicly or privately with his/her “friends” – in accordance with the individual’s privacy settings. In particular, Facebook becomes a virtual medium through which students comment extensively on that which they encounter during their medical training (among other things). For instance, continuing on from an earlier classroom discussion, one student’s Facebook status announced that he/she “would not repair the hymen if the patient had a previous sexual contact”. Another student undertaking an elective at Qatar’s brand-new orthopaedic and sports medicine hospital posted a comment regarding the calibre of facilities: “Scrubbing in at Aspetar, compared to u know where, it’s like the difference between first class and economy”. Interestingly, while users have the option of using Arabic for their personal profiles, for the most part Cornell students opt to communicate in English with their academic peers via Facebook (though of late, meaning three years down the line, I have noticed that this is beginning to change).

From an anthropological perspective, this social networking site has proven an invaluable research tool both in and out of the field. Daily Facebook status updates continue to be an important conduit of communication whereby I have been kept up to date with the latest issues, events and occurrences through remote contact with my informants (e.g. Student X is On Call in the MICU; or on the lead up to Match Day a lower classmate wrote, “Student X had fun today!...and is praying for Class 2009”;

⁹⁹ A status update is akin to an online personal thought-of-the-day, located at the top of the user’s personal profile.

on Match Day another posted her news as a status update “Student X IS GONNA BE A PEDIATRICIAN :D”).

In addition to a formal website, WCMC-Q has tapped into student culture and created its own Facebook persona and dedicated “Facebook Group” which currently boasts one hundred and seventy-seven members. This virtual space contains a series of student blogs pertaining to life at Cornell, a message board which is used to advertise upcoming events and functions as a space where individuals can initiate discussions, post questions and photos, as well as upload links to relevant articles and conference announcements. This “open” group comprises faculty, administrators, current students, graduates, as well prospective applicants wishing to inquire about the school as seen from the sample of postings below:

Hello..

i'm a student in 11th grade and i'm looking forward to b a student in Weill Cornell Medical College in Qatar inshallah, so i took advantage of Facebook and decided to join this group..to meet people and maybe to get more info. about the college.

A student affairs administrator offers encouragement and some sound advice to the seniors:

Wanting all of my students to go get plenty of rest and to knock their finals out of the park so they can enjoy their well deserved vacation! (Except Med 3 and 4. You guys keep working.)

Thus, Facebook provides a useful mechanism through which individuals mobilise and integrate themselves into the active virtual community of student doctors.

To date, each year group of medical students at Cornell have elected to create “closed” or restricted access Facebook groups for their individual cohorts. These groups can include their American counterparts, or limit membership to their immediate WCMC-Q class. Most of the material posted on class pages is uniquely relevant to that class, be it inside jokes, details of class outings, complaints about

faculty, questions pertaining to upcoming assignments or sharing information.

Below a student's post describes what textbooks he is finding useful in his study for an upcoming exam:

for studying biochem, i'm finding it useful to read the summaries at the end of some of the chapters in lippincott and added notes onto my first aid. it's short and to the point and supplements some unexplained points in first aid. the summaries are followed by 2 questions relevant to the chapter and seem like high-yield ones. Well they're easy anyway, so you can do them after failing qbank exams and feel good about yourself

When students are off-campus and training in the clinical settings, Facebook functions as an important means of coordinating social engagements and disseminating important information:

Hey guyz, since a lot of people are leaving on the 18th, lets have a class dinner/lunch on thursday (Jan 13th), the 2 options are
[1] <http://nyctacos.com/> on 2nd av and 80th - taco dinner
[2] <http://www.dhabanyc.com/menu.htm> - lexington av, bet 27 and 28th st
- HALAL indian lunch buffet for \$9! (or we can go for dinner)
Please vote now!

Facebook groups provide a valuable forum whereby students can also communicate remotely and frankly about things that are going on inside the college as the comment from a WCMC-Q student stationed in NY below demonstrates:

Trust me, Cornell doesn't give a s*** about the Doha students. I'm speaking now from the New York experience. All they care about is their name. If we keep up the crappy job we've been doing lately, they will shut the Doha campus down.

In some ways, Facebook functions as a site of resistance for WCMC-Q students in that it provides a virtual platform where students can voice their concerns and mobilise their peers, whilst evading administration's "constant surveillance" (e.g. "Student X thinks Cornell College is turning into a primary school :S :S with seating numbers...we need some trust"). The small student body at Cornell renders individual actions immediately visible if conducted within the physical confines of Education City. Students, aware that they are closely monitored, say that to be

perceived as stepping out of line in any manner would prove potentially lethal for their academic careers. Conscious of this, student activism is not a prominent feature of this Gulf campus. Reprieve from what is sensed to be “continual administrative scrutiny” is attained through virtual communication where students can fly under the proverbial administrative radar.

Students accepted to the Pre-medical Program have also followed suit, using Facebook as a medium through which to establish interpersonal connections even prior to arrival at the college. Days after admissions letters had been sent out, I noticed that a Weill Cornell Class of 2010 Facebook group was established. Listed in the group description section of the page it read: “Now presenting: The ENTIRE Weill Cornell Class of 2010, 8 time zones apart, and a hemisphere away...” During the first day of the 2008 Pre-medical Induction, I was amazed at the level of intimacy shared by students who had seemingly met for the first time in person only to be informed that they had become “friends” over the summer through their Facebook group. Thus, in facilitating the exchange of personal information, Facebook mediates electronic relationships within the WCMC community.

While students readily adapt to the presence of both sexes within the academic setting, a substantial amount of social interaction between the two occurs within the virtual domain. The diversity of the student population brings with it varying degrees of acceptable comportment with members of the opposite sex. Hence, the virtual arena provides a private space in which students are able to speak openly, flirt and air their grievances, all the while evading potential censure from judgmental conservative peers, and/or a disapproving non-academic community that adheres to strict gender segregation within public domains. While for the most part casual interactions between males and females are normative within the confines of the coeducational college, such relationships would be deemed unacceptable outside of it. For this reason, some students find it easier to conduct their coeducational exchanges virtually, under the convenient guise of being on-line for the purposes of academic or administrative activities. For instance, it would be far less complicated

for a devout Muslim female to converse electronically with a male group member versus a telephone conversation that could possibly be overheard/misinterpreted by anxious family members or friends located outside of the academic community. As a member of these “closed groups”, I have elected not to provide concrete examples by writing about them in the public domain.

In the absence of a Cornell-sanctioned Islamic student association, Muslim students find email a convenient and private means of communicating messages to fellow Muslim peers. The seemingly secular and scientific academic environment and its rigid schedule affords little room for religious display. Electronic messaging is utilised as a form of exchanging inspirational quotes from holy texts, conveying information about Islamic practice (e.g. cleansing after dissection), issuing “gentle reminders” about proper comportment in the college environment (e.g. discouraging participation in Halloween activities and coeducational social outings) or as a forum to discuss issues that arise at the medical school (e.g. conducting examinations on UTAs/GTAs). As discussed earlier, email is also used in the consultation of imams regarding ethical issues encountered during their medical training. The advantage of using email as a mode of communication for these students in particular is that it provides a private and safe arena in which to articulate their views without fear of being labelled being “extremist”, “conservative”, “anti-American”, “trouble-making”, “old-fashioned”, “Bedouin” or “brain-washed” by their non-Islamic peers or faculty. In this way, virtual communication provides a space in which like-minded students can connect without the fear of being misunderstood or misrepresented.

The same technology that brings the American programme to the Gulf is the same technology that sustains intimate contact between Arab students and their families when they are studying in the US. Internet access enables students to use email, Skype and other electronic means of communication to stay in frequent contact with their Arabic communities even when they are physically situated in another time zone and immersed in a different cultural milieu. Thus, technology plays an integral role in the fashioning of cross-cultural intimacies for WCMC-Q students during their

training, be it in the form of maintaining long-distance relationships, or exposure to facets of American cultural and material culture before they even commence their US placements. As a result the Qatari-based student population – who drink Starbucks coffee, gorge on Dunkin’ Donuts, wolf down Whoppers and KFC chicken – are no doubt far better prepared than students who might have embarked on a transnational training programme two decades earlier.

Mobile phones

Mobile phones are commonplace within the college environment and represent another form of technology that shapes intimacy. Ambivalent about the coeducational environment, Qatari parents in particular seem to use telecommunications technology as a tracking device through which they can be kept abreast of their daughters’ safety and whereabouts. If for example, a lecture runs over time, it is common to hear Qatari females’ mobile phones vibrate indicating that their drivers and chaperones are waiting to collect them outside the building.

The combination of heavy class schedules and the anti-social hours of their hospital rotations, transform communications technologies into “integrated...social life-support systems” (Bray 2008: 159). Be it through phone calls or SMS messaging, mobile phones are a convenient means of keeping in touch with families, friends, the college, drivers and food delivery services, especially when they are “on-call” in the hospitals (during which time they are also supplied with pagers). The use of text messaging is another form of furtive communication that the student doctors employ. I once received a text during a mid-morning lecture from a student that read, “Skipping class this afternoon and gonna catch a flick, wanna come?” Messages can be sent and received unobtrusively during lectures, in the hospital and from home, so students working on different schedules are regularly kept abreast of the latest news from the college and hospital via their telephones. Communication technologies also function as a veritable life-lines for the doctors-in-training when they are living abroad, far from their families and physically dispersed from and their immediate

peer group in the American metropolis. Upon arrival, students post their contact details via Facebook and text messaging, ensuring that the information is dispersed quickly. In this way, students rely on cell phones as strategic devices to transcend their physical displacement from their respective Arabic and Islamic support networks, rendering them present through participation in virtual communities.

To sum up, new media technologies are at the core of ground-breaking transformations in medical education. Educational exchanges that occur between NYC and the remote Qatari campus afford an opportunity to analysis the ways in which assemblages of contemporary pedagogical and medical technologies are shaping the face of transnational medical education. As discussed, “elaborate temporal structuration and observation of [and engagement with] a common object [a shared pedagogical programme]” is central to the collaborative project (Knorr-Cetina and Bruegger 2002: 944). Replication and transmission of the degree is facilitated and supported through complex technical interventions and the emergence of new institutional, academic and professional arrangements designed to compensate for absent corporeal, conceptual and organisational bodies. Hence, Cornell’s educational transplant is generating novel modes of knowledge transfer and sociality as it becomes enmeshed in its new environment.

CHAPTER SIX

Student Recipients

“The utilization of English can also be compared to the transplantation of a bodily organ. Although introduced from sheer necessity and in the expectation that it will assist its host in selfless dedication, the transplanted organ exacts a concession from its host. The host tissue regards the transplant as ‘foreign’ and blindly attempts to be rid of it. If the transplant survives, this is an overall success for the host organism. Yet it is also a small defeat, and the host’s immune system has itself been permanently altered in its failed attempt to reject the transplant. By analogy, a social system which adopts a foreign language as a necessary expedient might, if the adoption persists, be thereby altered.”

(Gallagher 1985: 6)

“A life that not only lives on, but that still lives properly, within the three-fold grip of the stranger/the foreign; that of the decision, of the organ and the transplant’s effects.”

(Nancy 2000: 25; trans. Hanson 2002)

The concessions that the educational transplant exacts from its Qatari host (e.g. graduated sovereignty, zones of exception, relationship to its citizenry) have been considered in previous chapters. Here the focus shifts from the educational transplant as it relates to Qatar, to an examination of the transplant metaphor at a more personal level. This chapter is about the medical students who receive the education transplant and explores the particular tensions that arise at WCMC-Q which force the recipients to confront bodily practices and piety within Islam, and how they maintain moral personhood in the context of their medical training.

Organ transfers have the potential to fundamentally alter, transform and ultimately create new bodies. Being fitted with a new organ can result in the recipient undergoing not only a physical transformation (from unhealthy and debilitated to

healthy), but also a psychological one as their bodies bend to medical intervention. Referring to the latter, Sharp explains that an identity shift occurs because the recipient incorporates an “unknown Other as an intrinsic part of their subjective sense of self” (Sharp 2006: 5). A passage cited from the philosopher Jean-Luc Nancy’s personal account of his transplant experience is illustrative:

The possibility of rejection establishes a strangeness that is two-fold: on the one hand, the foreignness of the grafted heart, which the host body identifies and attacks inasmuch as it is foreign; and, on the other, the foreignness of the state that the medical regimen produces in the host body, to protect the graft against rejection. The treatments given to the one who has received the grafted organ lower his immunity so that his body will better tolerate the foreign element. Medical practice thus renders the grafter a stranger to himself: stranger, that is, to his immune system’s identity – which is something like his physiological signature (2000: 28; translated by S. Hanson 2002).

Like the link between donor and recipient, the remote sites of the NY and Doha campuses become intimately connected via the process of extraction, transfer and re-implantation of the educational transplant. The medical students – the metaphorical recipients of the educational transplant – change as they graft their medical training onto their Arabic and Islamic notions of personhood. In the face of practices, modes of sociability and dispositions concomitant to their medical training, members of the student body seek to reconstruct their identities in accordance with their Arabic and Islamic communities’ existing modes of practice.

Both the requirements of the American curriculum and the current limitations of appropriate Qatari medical facilities oblige Cornell students to function and study within a transnational space. The students participate in a transnational circuit that requires them to spend time both at HMC in Doha and at NYPH for different blocks of their course at various times through out their training. Such an arrangement brings “distant worlds into immediate juxtaposition...[which demands] the chronic maintenance of two quite distinct ways of life...and markedly different forms of experience” (Rouse 2002: 163). Even though the students perceive this mode of

living as a means to an end and reconcile incongruent practices under the proviso of medicine, in terms of culture, each setting is “fundamentally distinct, involving quite different attitudes and practices concerning the use of time and space, the conduct of social relationships, and the orchestration of appearances” (Rouse 2002: 163). For instance, each location varies greatly in terms of fixed ideas about the nature of and adherence to specified social limits, ethics, and notions of what constitutes spiritual and sexual purity and pollution. The peculiarities of each social terrain influence the educational experience, the clinical encounter and patient preferences and expectations. Thus, student encounters with their family circles and the US/Qatari medical milieus require careful negotiation and function as important testing-grounds for their new identities.

In the previous chapter, I discussed how the educational sphere is evolving in such a way that the educational experience is one in which “localities around the world become less dependent on circumstances of co-presence (on face-to-face interaction) and more on interactions across distance (on relations with absent others)” (Inda and Rosaldo 2002: 9). The nexus of “presence and absence” is central to Giddens’ understanding of globalisation whereby social engagements occurring at a distance are enmeshed with local contextualities (1991: 21). Though neither uniform nor generalisable, through their engagement with the American transplant, students emerge from their medical training forever altered. The process of becoming a doctor requires one to acquire the language, expertise, knowledge and skills exclusive to the profession, in other words, to undergo an institutional indoctrination. Such comprehensive training results in the transformation of individuals who adopt novel perspectives and a new way of looking at the world (Sinclair 1997; Becker et al. 1961; Merton et al. 1957). As a particular domain of social experience, the transnational medical training inculcates a certain mode of modernity and an American academic and professional habitus that “does not always conform with what is the provincial strictures of every day existence” endorsed beyond the bounds of the institution (Fahy 1998: 193). The ways in which the transnational university articulates with students’ social spheres and religious-ethical traditions in the Arabic/

Islamic setting occasionally sheds light on elements of dissonance in the lives of students who attempt to vie with alternative sets of expectations.

Eickelman contends that university education engenders “new ‘authoritative’ ways of thinking about self, religion and politics” (1992: 645). Certainly, Cornell’s academic assemblage promotes information exchange and communication across ethnicities, religions, moralities and knowledge systems resulting in a novel set of conditions and new social forms. As products of this community, WCMC-Q students can be considered exemplars of Michael Fischer’s emergent forms of new life, involved as they are in “self-fashioning their own intercultural new identities” (2003: 20). These new subjectivities evolve against the backdrop of the medical college and the clinical settings, fertile ground on which new ethical situations and values are imposed or emerge. Fischer might describe these emergent worlds as “3rd spaces”, new terrains cultivated and contoured with personal and professional “ethical plateaus”. Ethical plateaus function as the sites where different people and technologies converge, creating new landscapes for perception and decision-making. Within these novel sites, the medical student is recast as an “ethical agent...configured within technoscientific systems, assemblages, and ecologies” that profoundly influence the actor (Fischer 2003: 11). Learning how to cope in this assemblage requires actors to think and behave in new ways and become new life forms in the process.

While social scientists have written about the process of becoming a medical student, my specific viewpoint is the particularity of becoming an *American* medical student in a non-American setting. Just as Sharp’s (1995) organ recipients “restructure their identities in the posttransplant phase of their lives”, WCMC-Q students also grapple with “ideological disjunctions” which arise from the competing needs to fully embody the foreign educational transplant whilst retaining a reputable Muslim/Arab persona. Using the voices of the actors themselves, in the upcoming section I explore the ways in which students come to see themselves as different from the persons they were when they first entered medical school.

Sharp's ethnographic research amongst organ transplant patients is referenced here as it provides some interesting insights into the new life forms that emerge from the transplant process. Above all, Sharp's data demonstrates that some recipients struggle to reconstruct their identities post surgery (1995: 358). The author attributes this to the fact that:

Transplantation is a personally transformative experience in which the transfer of organs to otherwise irreparable bodies often radically alters an organ recipient's definition of self. These personal transformations are dynamic and develop within the context of a particular cultural milieu... underscoring the need to view transplantation as a social process that develops over time. Transplants create new – or complicate existing – social relationships that affect how organ recipients assess their own social worth (1995: 360).

Post transplant, organ recipients occasionally report the sense of having appropriated some of the anonymous donor's preferences, memories, morality, emotions and physical qualities. Before a suitable match is procured, potential candidates often live with debilitating organ failure for protracted periods. Thus, it is common for patients to convey a sense of being "reborn", the consequence of incorporating the healthy donor organ into the recalibrated self (1995: 372).

Far from being instantaneous, Sharp insists that this renewal through transplantation should be recognised as a social process that occurs over time. The transformation is twofold: on a private level, where the host adjusts to the embodiment of the new organ and the sense of being imbued with the donor's characteristics; and the public reaction to the organ recipient as he/she reintegrates himself/herself back into the community as an overhauled, revitalised and fully-functioning person. I would suggest that some students, particularly those from more traditional families, encounter an analogous reception as the local community re-evaluates their ascribed status following their transnational medical training. Often, medical students who are reclassified as "American-educated," "anglicised" and/or "modern", encounter tensions in their social and domestic spheres.

Transplantation is a contested issue specifically because it propagates ethical and social dilemmas and brings a number of ideological contradictions to the fore (Sharp 1995: 359). This being the case, Sharp notes that recipients' post transplant attempts to rebrand themselves as "vital, whole and socially valuable" are overshadowed by ethical and social debates tied to the harvesting of body parts. This occurs particularly "...in the public or social arena, [where] numerous forces may undermine a recipient's attempts to redefine his or her identity as a healthy one following transplantation...Among the most frustrating experiences affecting a recipient's sense of self hinges on the larger factors of social worth and stigma" (Sharp 1995: 373). Despite making full recoveries some transplant recipients continue to be stigmatised by their former status, occupying an intermediary position somewhere between no-longer-deathly-ill and not-entirely-cured.

Again, if we equate the foreign medical degree with an organ transplant, the invasive transplantation process also involves the restructuring of students' subjective identities and precipitates a public response in the community's cultural construction of the American-trained medical students. Similar to Sharp's informants, the educational transplant recipients encounter ideological contradictions that "bear serious consequences for how organ recipients reshape their identities in reference to their reconstructed bodies" (1995: 360). Medical students are concerned that having undergone Cornell's enculturation process that they will be perceived to have unconsciously acquired the sensibilities that characterise the culture of the American medical school at the expense of their own socially valued traditions. As Fahy observed with his Moroccan university students, "the struggle to translate what one acquires from the 'modern' experience into one's social existence is rarely located in a domain of exchange; there are few opportunities and rather circumscribed forums in which such interchange is realised" (1998: 194). This brings to mind a first year's comment about the hilarity and absurdity of trying to convince his mother that diamonds are merely allotropes of carbon and not the precious gems she is so fond

of. Only snippets of what is learned and what occurs within the medical college seem to be relayed to friends and family occupying their private domains.

Just as organ recipients “...draw from a private and imagined portrait of their donors and integrate this portrait into a newly constructed sense of self” (Sharp 1995: 371), Cornell students also modify their routines and reshape their identities post enrolment at the medical college. Although students need not rely on their imagination to conjure up their donors, the parallel lies in that they do have to assume an American academic and professional habitus in order to accommodate the educational transplant successfully.¹⁰⁰ The adoption of a foreign habitus requires students to downplay or abandon pre-existing character traits and to transgress cultural boundaries in their bid to become Western-trained physicians. Thus, the students’ embodiment of the transplant has a transformative impact on their identities. Females in particular – concerned with debasing their social value – are preoccupied with connotations of impurity and vocal about anxieties linked to potential stigmatisation on account of their immersion in the coeducational American academic programme. It should be noted that some of the issues that arise are not always a result of their medical training per se, but stem from the fact that pursuit of this training occurs in a coeducational setting.

Becoming “one of them”

Inside the boundary walls of Cornell, students come to identify themselves first and foremost as doctors-in-training, irrespective of the traits that define their identity beyond the institutional context. This was conveyed by a first year student who said, “It’s like the culture you [come] from does not really matter because you’re in Cornell now. You’re a Cornellian. You’re looked at as a first year medical student not as a Qatari student, or an Emirati student or whatever.” Via the process of assimilation, outsiders and students begin to redefine students’ identity, incorporating

¹⁰⁰ Donors do not remain anonymous in the Cornell context for the student recipients have daily contact with the virtual and on-site professors who supply the requisite training for the degree.

their new Cornell status. In general, students' shifting status is perceived in a positive light, considered one of bettering oneself and an encapsulation of the nation's move towards modernity. Yet, in choosing to undertake an American medical training, the actors align themselves with the leadership's agenda, but at the same time, against outmoded or traditional expectations.

Some students struggle to reconcile some aspects of their coeducational training with their Arab values, not so much their Islamic faith. In fact, their Islamic faith is often called upon during particularly stressful parts of their training. The day before the results of the match a female student used her Facebook status updates to solicit prayers of supplication: "Fatima is asking for duas [prayers] for the match, Inshallah khair for everyone!! please make dua NOW :)". One of her colleagues posted the following: "O God, I ask from Thee the best in Thy knowledge, so bless Muhammad and his Household and decree for me the best! Inspire us with knowledge to choose the best and make that a means to being pleased with what Thou hast decreed for us and submitting to what Thou hast decided! Prayers needed!" Religious phrases such as "Inshallah" or requests for prayers on the lead up to tests and examinations are a common feature of WCMC-Q student Facebook postings. Nor was it unusual to overhear students uttering or writing this phrase somewhere on their formal examination papers. As far as my research reveals, there is nothing about Islam inherently inimical to modern medical science. Rather, their concerns are bound up in notions of selfhood, propriety and acceptable conduct within the unprecedented academic and clinical settings. Referring to their pervasive sense of familial obligation, community surveillance and the strictures of day-to-day life in the local context, some cited examples of these disconnects include: issues concerning dress, being unchaperoned, the necessity and appropriateness of conducting intimate exams on mock-patients, time, language and marriage.

Immersed as they are in an American pedagogical package and professional training, though delivered differently (i.e. VSLs), students utilise identical teaching resources that are inundated with Manhattan or US-centric statistics, American exemplars,

language, frames of reference, policies and procedures. While acquisition of such knowledge is crucial for passing US licensing examinations, this reliance on non-Arabic educational products demands that students acquire a working knowledge of, and an appropriation of Western norms, values, beliefs, practices and ideas associated with the clinical encounter. Such exposure to and rapid absorption of a foreign model and secular ideas lead some onlookers and some students themselves to regard WCMC-Q actors as Americanised. One abaya-clad female relatively new to the programme complains:

People, they think that I have changed. They think I'm becoming more Americanised because here we talk in English. Or sometimes I cannot phrase a word in Arabic so I translate it to English. They say, "she's just trying to express her level of English." Like you're trying to show off. Also, if I'm wearing pants with accessories [visible when the abaya is removed] they call it "American style". They say to me, "oh, you're becoming an American girl" or "you're affected by that American culture."

Both males and females recounted similar anecdotes in which their actions were subject to commentary by people in their private spheres. According to Göle, students undertaking a secular education in an Islamic setting are:

Faced with a radical choice: they can be either culturally Western or Muslim. It is this choice, and the polarity embedded within it, that generates cognitive dissonance around the separate value systems of the elites and the rest of the populace and thus raises the issue of competing legitimacies (1996: 16).

Amongst traditionalists, there seems to be a pervasive fear in the Gulf of the dilution of Arabic culture so any perceptible changes that are detected in WCMC-Q students are immediately attributed to the American college environment. This is particularly the case with language whereby the seeming marginalisation of the students' indigenous language is closely associated with the process of becoming "Americanised" and losing their "Arabness".

Language

Language plays such a fundamental role in maintaining the exclusivity of the medical profession that students often reflect on their acquisition of “Doctorese”.¹⁰¹ Student-doctors’ use of this expansive vernacular directly corresponds to their clinical experiences and growing confidence. It also reflects an increasingly medicalised worldview. A student’s comment during a first year anatomy lab provides an illustrative example: “From this day forward I will only refer to the knee cap as the patella.” Knowledge of this esoteric terminology demonstrates that doctors-in-training are becoming one of the initiated few. As a hallmark of the profession, “learning the vocabulary is a normalizing process and one way that the professional persona is internalized” (Jaye et al. 2006: 147). No doubt, this medicalisation of language also occurs in Arabic medical schools as they learn about the anatomical form. Students attending the English-medium college, however, are taught how to communicate as medical professionals exclusively in English. This means that their medical vocabulary, phraseology and bedside manner are delivered in a foreign parlance. The exclusive use of English, however, does not necessarily contribute to the Qatari goal of increasing the number of domestic physicians who will be able to cater to the needs of the indigenous population.

All of the Arabic-educated students hailing from governmental schools are new speakers of English. Although English is currently being incorporated into the science curriculum of schools in Qatar, these students were not the beneficiaries of such initiatives. Despite having achieved sufficient scores on the TOEFL exams to enter the medical programme, most initially lacked the confidence, fluency and sufficient vocabulary to communicate comfortably in their second language. The combined presence of an English-speaking faculty and immersion in an English-speaking learning environment does however foster rapid improvement in their English competency.

¹⁰¹ An informal term employed by some faculty and students that likens medical language to a formal language such as Cantonese or Japanese.

When asked to describe what it is like making the transition from the college environment to their social environments almost all of individuals who notice that their personality shifts from one setting to another flag up language as a predominant signifier. E'temaad, a Qatari student, resorts to prefixing "Cornell" to his name when referring to his English-speaking identity:

Especially in college, most of the time you're speaking English and once you go back home you don't speak English. You don't ever speak English, you always speak in Arabic. It feels different, [like] when I'm talking in English that's not really me, that's just the Cornell E'temaad, but once I'm back home that's normal E'temaad. Yeah, sometimes this happens. The thing is, nowadays that I'm talking in English a lot in college, sometimes when I go back home I kind of forget a few words in Arabic. Like I actually slip an English word in and it sounds really wrong.

E'temaad equates his English-speaking self with his Cornell persona. He employs English within the confines of the academic institution but expects (and is expected by others) to use Arabic in all other social contexts. As he achieves fluency in the new language, however, sometimes he accidentally substitutes English words in lieu of Arabic ones.

Another student reports similar linguistic slippages and the danger of being perceived as "arrogant" and "superior" outside the academic venue:

It's strange that sometimes when we are speaking with each other at college or out socially that something will come up and the conversation will automatically slip into English until one of us notices and says, 'Why aren't we speaking in Arabic?' It's the same if I see an Arabic doctor outside of Cornell. When we are in a Cornell situation we have to use English, but if I see him outside I automatically speak in Arabic. If you don't speak in Arabic you seem arrogant and superior, like you are showing-off that you go to an American college.

In order to avoid estrangement and risk alienating one's family members, friends and/or professional superiors it becomes important, therefore, to downplay one's ability to speak English in the Qatari milieu. A student's use of Arabic or English

language is clearly dependent on “the contexts it furnishes, the spaces it designates, [and] the forms of social interaction it makes available” (Fahy 1998: 281).

Alternative versions of selfhood are employed in academic, clinical and social settings.

Sitting over a Starbucks coffee, Hessa, a third year student, provides yet another example of the language barrier:

When I sit with them, the girls [at home] and chat it's a whole different thing than what is said at Cornell. Inside Cornell we talk about lots of medical issues and our jokes and discussions are a little Westernised. I mean there are jokes that my cousins and aunts will never understand because it's just very Western... Sometimes I do have difficulty going and chatting with them... Now I speak more English than I speak Arabic which is embarrassing... Because I haven't read and I haven't talked in Arabic for a while it's really affecting my Arabic language and it is my first language. I shouldn't be speaking English; I should be speaking in Arabic.

Not surprisingly, she points out that the conversational content and humour is context dependent. Her embarrassment stems from the fact that as she becomes fluent in English, she is compromising her ability to communicate effectively in her native language with actors in her private sphere. While her conversations with her medical colleagues often revolve around the minutiae of medicine or shared experiences, she sometimes struggles to relate to those outside of her medical school setting. The perceived estrangement between Hessa and her relatives is indicative of the intensive acculturation process that she has undergone during her time at Cornell. The student attributes her estrangement from her non-academic friends and family to being westernised. Throughout our lengthy conversation, Hessa constantly refers to “us” and “them” as well as “insiders” and “outsiders”. That Hessa's vignette differentiates between “us” and “them” is important. “Insiders” and “us” correspond directly to people at WCMC-Q with whom she converses in English, many of whom are also native Arabic speakers. Even though the reported speech certainly frames things in a binary fashion, the “us” versus “them” framework is actually challenged

by these students. They are becoming something/someone else, neither fully “us” nor “them”. Attending college provides an opportunity for students to develop new identities, “trying on new roles [and] discarding old ones” (Moffat 1989: 33) but these Cornellian identities are full of contradictions on account of embodying the foreign educational transplant.

The fact that these students find themselves accidentally slipping into English and starting to forget words in Arabic is disconcerting for them. Students refer to such moments as memory lapses. When these lapses occur during HMC clerkships, they are sometimes regarded as deliberate affectations, geared to differentiate themselves from their Arabic colleagues or showcase their status as American-trained students. Arabic is the language of professional practice in this region. It is impossible to determine, therefore, if the animosity directed towards the English-speaking students is a form of insecurity on part of the medical staff, or rather a deliberate attempt to preserve Arabic as the *lingua-franca* inside the clinical settings. The medical students, ever conscious of the negative attention drawn by speaking English in the predominantly Arabic medical settings switch back to Arabic whenever they see an opportunity to do so.

Teaching at Cornell mandates that all communication, assignments, lectures, tutorials, presentations and evaluations between students and faculty occur in English. Outside the WCMC-Q domain, however, conversational exchanges between native Arabic speakers spontaneously revert to Arabic. Students also converse with their peers in a combination of the two languages when speaking informally, even at college. I often noted the juxtaposition of both languages in the anatomy lab as students worked over their cadavers. On one occasion I witnessed a dissection team of three males hovered over a severed thigh casually discussing the highlights of the previous night’s Manchester United match in Arabic. Continually checking over their shoulders to ensure they were out of earshot of the professors, they punctuated their conversation with English anatomical vocabulary (e.g. patella, ligament) and positional terms (e.g. anterior, posterior, dorsal) as they made their

way through the checklist of anatomical features they were expected to be able to identify.

Despite the dictates regarding the use of English when interfacing with Cornell students, the small minority of non-Arabic speaking students at WCMC-Q often complain about doctors communicating in Arabic during their internships at HMC. The choice of language employed in a particular setting is indicative of the presence or absence of Cornell's hegemony and surveillance.

Siegel's study, which traces the role of language in the Indonesian revolution, offers some insight into what it means to communicate in a non-indigenous *lingua franca*. He uses the "fetish of modernity" to describe an actor's "ability to achieve an identity as opposed to being always defined by identity given at birth" (Siegel 1997: 93), wherein the bearer of the fetish is recognised as a modern individual. Adoption of the non-native language involves an incessant translational struggle that demands one's own identity be abandoned and substituted by another (albeit, not yet consolidated) identity. Communicating in the *lingua franca* "offers one the opportunity for a certain excursion if not into a new identity, at least away from an old one" (Siegel 1997: 15). The doctors-in-training differ slightly in that they are not attempting to discard their old identities, but rather, are simulating a professional identity through their use of English.

The ability to communicate proficiently in English is pivotal for success at WCMC-Q. Fluency in the language of medicine is essential for students who wish to downplay their status as "foreign medical students" during research stints, electives and subinternships (when students have an opportunity to secure references from American clinicians). Though esoteric, command of the English technical terminology is vital for sitting American exams and subsequent professional practice in the US (if desired), in addition to publishing research in refereed academic journals. English is the undisputed language of authority in the scientific community in the North American setting.

Professional language

Language issues also extend into the Arabic clinical setting. While the globalisation of medicine imposes common usage of medical language and terminology in order to facilitate cross-cultural communication and collaborative exchanges (Harden 2006: 24), WCMC-Q students initially struggle to communicate effectively with Arabic-speaking doctors and the indigenous patient population:

A second-year Arabic-speaking student told me that he had learned all about meningitis in class, including the mechanism of the disease, symptoms, treatment et cetera. Two weeks later when visiting a medical clinic he came across a bilingual information leaflet about meningitis. “The penny dropped” only when he turned to the Arabic side of the pamphlet and discovered that meningitis is translated as *as-sahaya* in Arabic. Being previously familiar with *as-sahaya*, he said that had he been informed of the equivalent Arabic term from the onset, it would not have been necessary to learn about meningitis as an abstract/foreign concept.

Because the student’s grounded experience of illness has occurred in an Arabic context, his concrete associations of medical conditions are naturally linked to his knowledge of them in Arabic. Despite meningitis mapping directly onto the definition of *as-sahaya* in English-Arabic dictionaries, as neophytes, WCMC-Q students do not, at least initially, seem to correlate their knowledge and experience of medicine gleaned from their Arabic surroundings to abstract medical conditions taught in English in the college. It is often only after spending time in the clinical setting of HMC that Arabic students begin to make linguistic connections and link up pathologies learned at college and the lay terminology that they have amassed as a result of being raised in this setting.

Arabic patients expect their doctor-patient encounters to be conducted in Arabic, especially when it is obvious that the student-practitioner is himself/herself of Arabic descent. The fact that WCMC-Q students' acquisition of professional language is restricted to English hinders students from communicating effectively with patients in what is expected to be a common language. Between rounds and seeking an immediate response, one Arabic student resorts to posting her translation question on Facebook:

Zeina Al Kaza what is diverticulosis in arabic!?

Within ten minutes she receives a response from one of her peers:

Nasser Al-Khatani [Zeina], there is a dictionary for that in the Library, and i wud translate it into "JE000B M3OWAYA"

To which she replies emoticonly:

I am not sure that our library has a dictionary for english-arabic medical terms :) FB is quicker, it just proved itself :)

At the early stages of their clinical encounters, Arab-speaking students fear that their credibility amongst Arab doctors is undermined and that they lose their patients' confidence when they are unable to communicate using Arabic terminology (e.g. not knowing the Arabic term for spleen). One student complained that whilst trying to discuss sexual "penetration" with a patient the only way she could think of translating it was with the phrase, "when your husband enters and exits you over and over again". Psychiatry rotations in Qatar also prove difficult as patient diagnosis and prognosis is heavily dependent on language. While students are trained in the nuances of discussing suicidal tendencies in English, for instance, they struggle to tease out the necessary information in a sensitive and comprehensible manner in Arabic.

The *lingua franca* promoted at WCMC-Q belongs to few as a first language. For some students, mastering it is perceived to come at the expense of proficiency in their native language. Using a now familiar transplant metaphor, Gallagher (quoted above 1985: 6) points out that the implementation of an English-medium curriculum at a Saudi medical school proved a double-edged sword. Despite English being

deployed out of necessity and in an effort to modernise and improve the programme, its implementation has an unfavourable consequence, namely that it “exacts a concession” thereby compromising the host’s immune system – the indigenous language.

Deviating slightly from my use of transplantation, Gallagher’s analogy equates English with a transplanted organ and oral culture to that of the recipient’s body. The introduction of English into a traditional Arabic-speaking culture forever modifies it. By extension, enrolment at WCMC-Q has the systemic effect of subordinating Arabic students’ mother tongue. At college it is almost as if their Arabic language is being marginalised, a vestigial part of their life before medical school, closely aligned with the more traditional domains of religion, literature and *shari’a* law. The premium placed on English proficiency ultimately casts “a shadow of invalidity upon the Arabic language as being unable to convey the messages and meanings associated with progress” (Gallagher 1985: 60). English, on the other hand is being posited as the language synonymous with modernisation and secular science.

Challenging one’s religion?

While good practice recommends that anthropologists attempt to cast aside all of his/her own suppositions about what is going to occur in the field, I could not help hypothesising that Muslim students would find their faith both challenged and undermined during their time spent at the medical school. After all, Cornell would be the setting where many of the students would first encounter the concept of evolution, learn about molecular biology and be trained see the world scientifically. At the conclusion of his fourth year of training, one conservative student explains: “Medical school changes you. At first when I came to Cornell my religion was challenging medicine, now it’s medicine challenging aspects of my faith”. His inability to square up certain practices that he has to perform within the hospital setting such as Do Not Resuscitate (DNRs) directives leave him wondering if in fulfilling the dying wishes of the patient and/or family, or – if by not resuscitating –

he is guilty of killing someone as his faith would have him believe. For Hassan, an ongoing and shifting dialectic exists between religion and his acquisition of scientific knowledge. Yet, only three students (all males) confided that their faith had been fundamentally challenged during the course of their studies, one of whom claims to have “abandoned his faith altogether”. This anomalous student attributes the evidence put forth during a unit on evolutionary genetics as the main reason why he no longer considers himself a Muslim, claiming that his “religious beliefs were replaced by science”. Given the context this was no small revelation. Apostasy (*ridda* – turning back) in Islam is considered a profound insult to God, thus his renunciation of his faith is kept under wraps both from his peers and his family.

In Qatar where Islam is the official religion, apostasy is classified as a capital offence, though no executions have been reported. Due to the highly controversial and sensitive nature of the topic, students will have been reluctant to admit that their faith was altered or challenged in the face of science. Yet most students did, without prompting, furnish me with concrete examples of how their faith was altered.

In an email correspondence, one student points out that some students leave these “dialects” between science and religion “uncooked”, infrequently revisiting them, and only resorting to their faith during stressful situations. It also turns out that some of the students had actually studied the theory of evolution before their arrival at Cornell without it challenging their faith. The student explains that this information only becomes problematic in the context of Cornell because of the impact that their education has on their thinking:

1. Cornell PROMOTES CRITICAL THINKING so it is only then that we start criticising these theories, and also, and very importantly, start criticising our own beliefs and traditions. 2. Cornell...also teaches about the authors...I think this is very important, as we actually start reading about other mind-products of these people, and learn how they think...this opens a lot of doors for issues to debate. 3. Since Cornell teaches in English, this opens even more doors to learn about the writings/thoughts of these people, i.e. Darwin, Freud...the

more debates this promotes between our beliefs/values/faith and science. This type of education (i.e. critical thinking) is not so evident in other types of institutions in the Middle East.

Transformed by the educational experience, this student-physician demonstrates how the application of critical thinking now leads him to interrogate text and challenge information that he is exposed to.

The fact is however that the overwhelming majority of the Muslim students, both Arab and non-Arab, report that attending medical school has strengthened rather than challenged their religious faith. For many students knowledge gained at college – via texts, lectures and investigations of the body – corroborates knowledge imparted through the Quran and the Sunnah. I was intrigued by the ways in which students express the resonances between science and faith, and encouraged them to explain this to me.

Returning from the hospital, after a gruelling overnight on-call shift, Hakeem hitches a ride with me back to the dorms in Education City. By the time we pull into the dusty parking lot of the Murjan Residence Building, we are deeply engrossed in a conversation about medicine and religion. Despite the dark circles under his eyes, he is keen to continue the conversation so we go to my office and order a Burger King delivery to stave off his hunger. Suitably refuelled, Hakeem spends the next three and a half hours discussing the nuances of his medical school experience. Hakeem considers himself a devout Muslim and “wants to share his insight into how his religion and his knowledge of science overlap”. Hakeem’s articulate discussion of how his faith maps onto his acquisition of medical knowledge echoes that expressed by many of his Arab peers.

Hakeem commences by stressing the fact that Muslims view everything in life through the prism of religion:

Hakeem: Muslims view everything in life, birth, death and everything in between through religion. Our code of living, our code of behaviour is found in the holy book of the Quran and the Sunnah of the prophet and also in the interpretation[s] of that Sunnah...Anything we do in life we try to do it to the best of our ability and through the prism and the teachings of our prophet and of course, through the specific instructions that are in the holy book...Many things that I knew before [attending medical school] from religion have been solidified and crystallised in another light, in another form, in another way, that of the scientific method.

Tanya: And not challenged?

Hakeem: There has been no discrepancy between the two...but the point I'm trying to make is that, from the Muslim standpoint, there really should be no disassociation between science and religion and life. It's all interconnected. It's all one whole that should function together because so far, in my understanding in the teachings of religion there have been no instances where science said one thing and religion said another thing and clashed, you know, where one contradicted the other...Yeah, sure I'm learning a lot of new things, I'm learning about human disease, about treatment and about a whole new body of knowledge, but honestly I'm just building upon my religious upbringing and my religious knowledge. I'm just linking it together and I plan to use both at once as a practitioner in the future.

Hakeem is not unique in his assertion that Islam is not simply a religion, but rather a way of life – several of his peers corroborated his statement. Adherents of the Islamic faith maintain that as such, religion cannot be isolated or compartmentalised from other facets of their lives, so faith constitutes a necessary and integral part of everything ranging from the likes of education, law, family and politics. The key point that emerges from the transcript is Hakeem's triangulation of science, medicine and faith. Hakeem regards the three components to be not only compatible, but also mutually substantiating. In his experience, the science he has learned in the process of becoming a doctor has not contradicted anything that he has come to learn through his faith. For Hakeem, science provides many concrete examples of his god's omnipotence. Hakeem's assertion that he is merely building upon his religious knowledge and that his secular learning is still rooted in religious tenets reflects a common argument within modernist Muslim reform movements.

Hakeem goes on to explain how his encounters with the human body in a medical capacity strengthen his faith. He refers to the body as a complex machine, beyond the scope and technical capability of engineers who could never replicate the individual components such as cells, tissues and organs, much less an interconnected organism. To him, the magnitude of human creation can only be attributed to God. The micro processes that occur inside the body further convince Hakeem:

So many times when I was studying physiology – cellular physiology especially – and the intricacy of cellular reactions and the speed at which they occur and the very tight regulation steps, you know, where just a [single] step, if it goes wrong, you have a disease [which] is either very debilitating or mildly debilitating to a person. It's very impressive how this intricate balance really needs to be... Everything is subject to God's command, how he ordered it and how he set it... There was nothing in religion that was denying the science, and that there was nothing in science that I've read that didn't make sense from the religious standpoint, which is why, I strongly believe that the two are very closely related and they prove each other... I find studying medicine really something truly special and amazing, it helps me [in] being a better believer.

According to many students, God's greatness is regularly revealed within the confines of the anatomy lab where students have the opportunity to explore the intricacies of the human body first hand. A casual conversation with Salma, an upper-year student of Egyptian descent, reveals that as with Hakeem, it is not merely the complexity of bodily structures, but their mechanical capacity to regulate themselves that is cited as unequivocal proof that the creator's hand is at work.

Medical school strengthened [my faith] many times... when you study physiology for example, when you study the kidney's renal system and you see how complicated it is. For instance, a very small kidney has all these [potential] complications from the molecule, to the creatinine and the BUN all the way up to the kidney and the ureters. You see it and you just think: I'm sure he made all of that, you know? So, that's how. But from a practical point of view, like from how I *practice* my religion [now that she is enrolled at medical school], I think it decreases it because now I don't have enough time to read the Quran like I used to. I used have

seven of the thirty chapters of Quran memorised [pointing to her head]. I was going to finish but since I came to Cornell I have forgotten most of them. I don't review anymore. So I don't do the practices, but like *faith-wise*, it's been strengthened.

That Salma differentiates between her faith and her *practice* of faith is revealing. While she and fellow students report that the intensity of their faith deepens as they learn more about the body and how it functions, many cite temporal constraints that restrict their opportunities to execute religious practice. Although her faith is strengthened as she gleans evidence of God's work in the practical educational tasks of looking at the physiology of the body, the intensity of the programme occasionally compromises her active engagement in spiritual tasks.

For instance, the schedule, geared to facilitate maximum communication with the NY campus, coincides with three prayer times: the noon (*salat dhuhur*); afternoon (*salat asr*); and sunset (*salat maghrib*). In addition, back-to-back classes and movement between the academic and clinical settings provide insufficient time for students to properly cleanse and visit the prayer rooms throughout the course of the day.¹⁰² As a result, students have resorted to keeping prayer mats in seminar rooms in order to maximise their break times to fit in prayers. Commenting on the hectic demands of medical school, one student put it succinctly, "you barely have time to pray and read some Quran and that's it." Muslim students also complain that tests and assignments are often scheduled throughout Ramadan and that they are often expected to sit exams the day after Eid. Such a demanding schedule places time constraints on the students, sometimes forcing them to skip obligatory prayers; limits the time they can allocate to reading the Quran; prevents them from regularly attending mosque and "getting into the spirit of Ramadan", thus culminating in students' estrangement from their faith and contributing to their feeling like "bad" Muslims.

¹⁰² The original prayer room is situated on the opposite side of the building, far removed from the hall where lectures and labs are held (nor is located near a washroom for ritual cleansing).

Despite the so-called “secular” and scientific environment of the medical school, both Hakeem and Salma seem unshaken in their beliefs. Instead, both students articulate that they understand their faith and science to be in harmony.

Occasionalism, a causation theory that ascribes all events to God’s control, comprises an important part of Salma and Hakeem’s Islamic faith and plays an important role in how medicine is practiced in the clinical setting.

Although faculty and students generally perceive WCMC-Q to be neutral space for scientific experimentation, many of the doctors-in-training continue to be strong believers. It is reasonable to query how this can be possible. Anthropologists point out that the social, political, economic and technological changes associated with modernity often afford opportunities for religious revival (e.g. Asad 2003; Hirschkind 2001). Hirschkind’s fieldwork amongst cassette-sermon listeners in Egypt demonstrates that his informants harness technology as a means of incorporating their faith into their contemporary lives. Thus, cassette technology renders “the acquisition of a kind of traditional knowledge possible within the times and spaces of modern urban existence, one where the long-term study, immersion, and apprenticeship characteristic of Islamic pedagogical practices has become inaccessible and impractical to most people” (Hirschkind 2001: 642).

Certainly, the intensity of the medical curriculum combined with its hectic schedule makes it difficult for students to actively practice their faith. In lieu of this, perhaps instead, their acquisition of “modern” knowledge of the anatomy and physiology of the body becomes an enabling condition for “traditional practices” within the confines of the medical college. “Most weeks I can’t afford to spend time with God at the mosque. I see him in the lab instead”, a second year student explained. In this way, the classroom setting – a site where scientific knowledge is usually privileged – creates a space for students where tangible activities and practical tasks related to their medical training simultaneously function to reify God, making their faith more accessible. What we have here is a convergence of the sacred and the profane,

whereby some students' religious faith is seemingly revitalised within the medical school.

Cultural pioneers

Since its founding, WCMC-Q has become the premier production site for Arab physicians trained in the American biomedical tradition. Yet, the establishment of WCMC-Q was a groundbreaking event on many levels. Its arrival spearheaded some fundamental shifts in policy, education and medicine, never before seen in the Gulf. Students who were brave enough to enrol in the nascent programme were pioneers, not only because they were opting to attend the first coeducational university, but also because it was based on an American medical educational prototype. In true pioneering spirit, WCMC-Q students embarked on a journey through uncharted territory.

The journey of these educational pioneers has been fraught with issues, many of them stemming from the strict Islamic and Arabic setting. WCMC-Q students, by necessity, have to engage in prescribed curricular activities as set by Cornell and the American licensing board (LCME). At times, however, these requirements are at loggerheads with normative Islamic and *khaliji* social practices, thus the college becomes a site of competing values. Despite being situated in a zone of exception, the small size of Doha combined with its tight social networks still renders some student behaviour visible and subject to close surveillance both inside and outside of the college. In such an environment, rumours about the college and the students themselves are able to travel quickly. In order to protect one's reputation, therefore, it is essential to be seen to be adhering to the strict Islamic and cultural codes that govern the nation.

Any transgression of such mores and values is subject to potential comment by people outside of the college, be it locally or within the broader region. Extended families and tribal affinities ensure that news is communicated expediently

throughout the region. It is not surprising then that students, particularly females with traditional leanings, display caution and experience anxiety within the contested coeducational and American space that constitutes Cornell. WCMC-Q is a site in which virtuous conduct is rendered somewhat problematic in that some techniques, practices and rationales contravene local conventions. Applicable here is Stephen Collier and Andrew Lakoff's notion of "regimes of living" which refers to "a tentative and situated configuration of normative, technical and political elements that are brought into alignment in situations that present ethical problems – that is, situations in which the question of how to live is at stake" (2005: 23). Reflecting on her altered status, Najla, a female born and educated in Qatar complains:

It was better to stay in Qatar rather than going abroad. I mean, it's taking one step at a time. Going to a mixed college, that was one step and then going abroad that's another step. So, better [to] study here than go abroad. That was too much pressure on my parents; I mean this society and the way it looks at me, the way I'm...I don't know, going against the rules sort of, it's like an unwritten thing. Everyone knows that you can't really mix [with males]; it's a separate society. So, that's one rule I've broken so far. When I go back home especially when I'm with my family, not my parents, but like first relatives and everything, they see me as someone who's different, not as a typical Qatari girl and I don't like that. They see me as someone who has broken rules, someone who the rules don't apply to. Like my cousin will say, "You can do whatever you want, you've broken rules; you go to a mixed college." So, it's like I'm an outsider to them or something.

In choosing to study medicine in her home country, Najla is forced to break with tradition by attending college with males. In an earlier conversation, Najla admitted that her parents did not wish her to study abroad and so she deferred to their wishes. Familial obligations are considered moral imperatives in Islam. From a young age, children are taught through scripture about the centrality of family, their responsibilities to kin and to respect and defer to one's parents and elders. Thus, staying close to her family is an expression of filial piety towards her parents. The irony is that in doing so, she is now subject to the gaze and censure of her local community who are only beginning to adjust to the notion of a coeducational, American tertiary institution and all that it entails. In seeing herself through the lens

of some of her disapproving relatives, in spite of Najla's desire to pursue a "noble career in medicine" she comes to regard herself as one who breaks rules. Being a "rule-breaker" is counterintuitive in a patriarchal, autocratic and Islamic society (Mahmood 2005). Deference to authority – be it in the form of complete submission to God's absolute authority, obedience to one's parents, unquestioning compliance in the classroom, or strict abidance by Emiri decrees – respect for authority is a central, governing tenet of Gulf society.

Although Najla's immediate family is supportive of her academic endeavours, she describes her extended family as being "more traditional" and generally less informed about the nuances of her medical training, hence they seem more suspicious of her activities inside Cornell.¹⁰³ Students of both genders report similar scenarios, though the females' relatives tend to be more vocal in their disapproval. Consequently, females and Qatari females in particular are especially conscious of being judged, both inside and outside of the college.

Inside WCMC-Q, Qatari female actions are subject to close observation by their peers. A few Qatari females admitted that they are worried about their reputations especially around "newbies", individuals who may not yet be fully acquainted with the dominant culture within the medical school setting. The Foundation Program, designed to support incoming students – which is chiefly populated by Qatari nationals educated in governmental schools – is a particular source of concern. Foundation students tend to represent a more traditional demographic of the Qatari population. The concern for many Qatari medical students is that students in the Foundation Program will misread and/or misinterpret their elder peers' behaviour. In a discussion about issues of propriety, an upper year Qatari female cited male students in the Foundation Program as being especially problematic. Despite it being a coeducational setting, the presence of these Qatari males:

¹⁰³ Another self-identified "Bedouin" student told me that her entire extended family "disowned her" when they were informed of her intention to study medicine at Cornell. While her story may be an isolated incident, it serves to demonstrate the extreme conservatism of some members of Gulf society.

...makes it more difficult for us [as] Qatari girls to interact with our classmates as freely as we used to because we still think that these newcomer Qatari guys have the ideas that outsiders have... like, this Qatari girl, she should not be acting the way she is. And then the word would spread out of the college, get exaggerated and rumours will begin coming out. That's something that really worries us.

Qatari females fear that newcomers, unfamiliar with the social parameters which govern the coeducational academic setting, will be more likely to pass judgment on the appropriateness of their behaviour. The reality is that not all of the Foundation students will be accepted into the Pre-medical Program and the worry is that disgruntled students who are rejected will re-enter the broader Qatari community with stories that will simultaneously discredit Qatari females and jeopardise WCMC-Q's reputation.

A similar situation is detected outside the college when the coeducational cohorts venture on excursions such as field trips or to clinical settings in the local community. Both males and females voice apprehensions about engaging socially with the opposite sex outside the walls of Cornell. One male first-year student explains that although he is not bothered about issues of propriety *inside* the college because everyone "knows how it works in here", his overriding concern is about "how they are perceived on the *outside*" when his class travels to Hamad Hospital. The potential for misinterpretation of mixed gender interaction by "outsiders" is summoned forth as one of the primary reasons that Qatari students and those with traditional leanings abstain from participating in social events that occur beyond the perimeter of the college or outside of regular class hours. One's reputation is a matter of paramount importance, and this is particularly the case for females.

A good Muslim girl

Malika has stopped by my office to browse through my DVD collection in the hopes of finding a Japanese anime film or a recent Disney film. She is out of luck on both accounts and instead, settles for Michael Moore's documentary entitled

“Sicko” (coincidentally, one of the NY professors had assigned viewing it). To my surprise she knocks back one of my all-time favourites, *Bridget Jones’s Diary* on the basis that she “doesn’t approve of, or understand, someone who is still happy to be dating men in her mid-thirties”.

The fact that Malika plans to watch a movie is a good indication that her schedule is lighter than usual and I suggest that it might be a good time to fit in the interview that I had been pestering her for for several weeks. I am keen to meet with her on the basis that she had been educated in one of the governmental schools located in Doha and have to ensure that the interview takes place during the regular college hours because she is chaperoned to and from college every day. We chose to meet the following day in the privacy of my office because it is one of the few places that has a windowless door that can be locked, affording her a rare opportunity to remove her veil within the Cornell setting.

In the end, our extended conversation occurs over the space of three separate sessions during which Malika candidly discusses her transformed self. Her poignant account dramatically conveys some of the disjunctions that emerge between her academic and social worlds.

Tanya: Have you encountered any ethical issues or activities that you’ve been uncomfortable with?

Malika: Examining patients of the other sex or cadavers – anything that has to do with medicine – I didn’t have any problem with because we knew from the beginning that if you are going into medicine, you’ll be exposed to everything...Culturally we know that and religiously we know that, so it’s not going to counteract anything of my culture or anything of my religion so I know it’s okay. Even in my religion, if you are a female doctor and you have to touch a male patient, it’s fine because you’re practising and you’re doing it in a medical and professional environment. You’re not touching a male anywhere else. You know what I mean? We can touch them if they come in for medical reasons, so that was fine. I didn’t have any problems with medicine but I had some problems coming to school and sitting with guys and laughing and chatting with them. Like, one week I had to

work with Awad so I sat with him for one week working together every single day and sometimes, we were suddenly alone in the anatomy lab. I'm like, "Oh my God, I'm alone with a guy. It's inappropriate. I shouldn't do that, but then, I have to work, I have to do it, so what should I do?" Like if you were to ask my dad, he would tell me "No, you shouldn't." If you would ask my mom, she'll be like, "It's okay, you're working." So it's not like we have a fine cut line between things... even higher Muslim people like the imams, some of them will tell you it's okay, some of them will tell you it's not and you'll be so confused.

Given that her American medical training takes place in a broader Arabic context, competing values are at stake. Göle's informants mentioned similar scenarios arising in their university in Turkey. The author explains the dilemma: "It is forbidden for a woman to stay alone with a man (*halvet*) who is not a family member because it is a possible sin and a possible imputation against her honor" (Göle 1996: 53). There exists a conflict between Malika's moral reasoning and her sense of pragmatism, making it difficult for her to discern how to conduct herself. In the end, she opted to continue working alongside her male peer. Provided an action is perceived to be under the category of "practising medicine", medical students are able to transcend the normal boundaries that restrict male-female interaction. This justification applies as long as the student is situated in a medical context. Yet, the above conversation is riddled with Malika's angst as she comes to terms with her medical school experience outside of the clearly delineated zones of the hospital and the medical college where examinations and dissections of the opposite sex are sterilised, normalised and routine.

The variety of responses regarding propriety offered up by individuals unaffiliated with the medical school is indicative of the scope of Islamic law and the range of positions found within it. The widely divergent standards at play in her social domain reflect the different schools' interpretations of Islamic law (the four Sunni schools – Shafii, Hanbali, Maliki and Hanafi as well as the Ja'fari school associated with the Shia) that are being used to judge the scenarios. Thus, a wide spectrum of "appropriate" practices is exhibited in Qatar.

In Qatar, the Sunnis greatly outnumber the small Shia minority and these demographics are reflected inside WCMC-Q. Though subtle, the specificities of rules governing each sect also come into play within the medical school. *Wudu* (ablution) following dissection is an illustrative example. While all the schools consider *taharah* (prescribed purity i.e. the removal of physical impurities like blood and bodily fluids) a necessary condition for the validity of prayer, there is disagreement as to how to attain a state of purity following dissection. Students of the Hanbali, Shafii and Maliki schools were of the opinion that partial ablution was adequate as the touching of a corpse does not result in a major or minor impurity, whereas Jafari students intimated that full ablution is obligatory on touching a dead body that is cold (or even an amputated limb containing bone) with bare hands (whereas as touching with gloves does not obligate *tahara*), but that the timing of the academic schedule did not make this feasible. Students who use their bare hands can do *tahara* after class; it is just that they cannot pray until they have done so.

Malika's primary concern is with the coeducational environment of the medical school where the curriculum demands student collaboration. Small class sizes and gender imbalances necessitate students working together in mixed-sex groups. Preparation for assignments, exams, tutorials and group projects often occur outside designated classroom hours and take place inside the college, often in remote spaces such as the anatomy lab and seminar rooms. It seems, however, that Malika differentiates between educational and medical activities. While the latter may require direct contact between opposite sexes, they can be justified as therapeutic interventions dictated as they are by necessity and that they follow prescribed procedures. This contrasts with educational activities that have learning as the end goal.

Further, medical procedures are transparent activities that occur under the gaze and direct supervision of medical professionals, whereas, less formal educational endeavours are subject to more self-scrutiny on the basis that they are less prescribed

and somewhat more clandestine. Engagement with the opposite sex during educational activities often takes place in unchaperoned settings where students are left to their own devices, unlike the clinical setting where they are under the close observation of clinical faculty. Such circumstances render educational activities more ambiguous and potentially open to misinterpretation, which is why Malika mentions the precarious situation she found herself in the anatomy lab.

A peer's comment on the importance of being vigilant is useful for framing Malika's anxiety:

I have a responsibility. I mean I believe in my cultural beliefs and I believe in my cultural values, and I should never break them or compromise them. I knew that being in a coed education does not mean that you will break them, no. I mean the main concern was most importantly that I keep my beliefs and my cultural values. I never thought that I would break them in any way but I had to make sure that people knew that. I think that was the most important [thing] because I'm [a] representative of this culture. So it's really important for me that I keep these values.

Their attendance at a coeducational institution demands that students be conscientious so as not to cross the limits decreed by their social and religious communities. Contrary to leading to a decline in religious observation, education at the US university has functioned as an impetus of awareness of Islamic knowledge and modes of virtuous comportment (for similar observations regarding education and religiosity see Eickelman 1992; Göle 1996; Mahmood 2005). Within the American college I witnessed a number of students (of both sexes) who articulated a concern for living in accord with Arabic and Islamic social mores through their emphasis on Islamic doctrines and forms of sociability – principal amongst these were Islamic piety and virtuous behaviour. The appropriation of these mores seems to anchor the self during its immersion in the Western academic milieu. Social responsibilities – largely governed by sex, age and family affiliation – demand that students display appropriate demeanour and adhere to accepted forms of conduct especially inside the contentious non-segregated space. The female prayer room was

always well stocked with pamphlets containing Islamic guidelines on how to conduct oneself in day-to-day life. In one cohort that I came to know particularly well it was common for Qatari students to send email reminders to their peers reminding them of proper comportment and how to avoid moral transgressions (e.g. avoidance of listening to pop music and dancing; participation in events).¹⁰⁴ In maintaining a high level of self-scrutiny, students become self-auditors.

Malika herself, unclear about boundary maintenance even inside this zone of exception, refers to the different responses that such a situation elicits. Of interest is how the flows and multiplicities of responses from outsiders resist the formation of these zones. Her father's advice, grounded in social morality, would be to extricate herself from the situation. She suggests that her mother's response would be more pragmatic, encouraging her to continue on the basis that she is not doing anything wrong. Were an imam to be consulted (which was occasionally done in person or by email), the advice would vary according to which imam was questioned. It is noteworthy that a few females confided that their fathers refuse to allow them to stay at the college to study after class. Instead, they are collected as soon as classes finish and are chaperoned back home where they work in isolation from their peers.

To veil or not to veil?

In a society that abides by strict protocols of sex segregation, students wishing to train as American physicians find it impossible to adhere to this edict. In her analysis of the factors that lead university students to adopt Islamic traditions such as veiling, Göle contends that:

The veil protects them against modernism and symbolizes their loyalty to Islam. The veil conceals the departure of Muslim women to the outside world, for, although the veiled women are in the outside

¹⁰⁴ Although Valentine's Day is marked by Medical School Executive Council sanctioned activities, prior to February 14th a student email was circulated to the whole student body urging Muslims not to participate in the Pagan-Christian holiday on the premise that it would jeopardise their chances of entering heaven.

[secular academic] world, they still remain in the “inside,” and the veil constantly reminds them that they belong to the *mahrem* (private) sphere (1996: 130).

It is perhaps no coincidence then that no fewer than five females began “to veil” upon entry to Cornell (despite the fact that several of their mothers did not wear the hijab).¹⁰⁵ After months of deliberation and what came to be known as Reem’s “to veil or not-to-veil” saga, the second year student who had previously sported bejeweled hoop earrings and loose shoulder-length hair, tells me that in making the decision to wear the veil she is “sending out a message to her male peers to respect her”. One of her peers, who commenced wearing a hijab when she entered the Medical Program explains that it is her way of “thanking God for helping her get in...and a sign of her commitment to her faith”. Similar to Mahmood’s observations of the women’s piety movement in Cairo, both Cornell students frame their decisions as expressions of modesty or piety (Mahmood 2005). One student’s decision conveyed a message to her male classmates about propriety; the other’s was a marked display of religious sociability. By donning veils both deliberately distance themselves from Western modernism associated with the educational transplant, signifying to outsiders their firm commitment to their faith and Arab tradition. Their decision to veil is perhaps indicative of what Göle describes as “the quest for differentiation from the Westernized self, for an ‘authentic’ Islamic way of life... engendered [by] a critical alertness for both traditional Islam and the contemporary forms of Western modernity imposed by the globalization of culture and lifestyles” (1996: 18). Emergent here is a new profile of educated Muslim women in the Gulf. These self-asserting females are taking advantage of new educational opportunities and primed to occupy influential positions in the future, all the while striving to retain their socio-religious identities.

In conversations with the few women who wore niqabs they all express concerns about how they will be received during the NY components of their training:

¹⁰⁵ For a recent account of veiling and related literature see Bowen 2007.

Sitting in a locked boardroom with her face completely exposed, Buthayna asks me directly about the type of reception I anticipate she might encounter during her mandatory twelve-week subinternships in NY. While acknowledging the multicultural composition of the metropolis, I suggest that in a post 9/11 climate and especially in doctor-patient encounters that people might react with a degree of trepidation.

On one occasion, an American male professor shares with me his strong opinion about the “inappropriateness of females wearing niqabs at a medical college”. I am told that during interviews, the same professor makes a point of asking *niqabiaat*¹⁰⁶ if they would ever consider removing the garment to determine if they are “liberal-minded enough to attend Cornell”. For those who do not comprehend veiling, it can be viewed as deviant or pathological, premised on the assumption that if modernisation and secularisation efforts were successful this anomalous act would cease to occur (Göle 1996: 9). The professor’s view, like that of many people, seems to conceptualise modernisation as a unilinear evolutionary path necessarily divorced from traditional mores and religious beliefs. The professor regards the traditional practice of veiling as incompatible with a liberal modern education and the enlightened, free-thinking individuals it seeks to produce (Göle 1996: 97).

In a separate incident in the woman’s toilet, I am party to a conversation that takes place between a niqab-wearing student and a faculty member who wears the hijab herself. The professor questioned the student’s rationale for wearing a niqab. When the student says that it is for religious reasons, the professor (in line with the majority of Islamic scholars) contests the student’s response on the grounds that the niqab is merely a traditional custom and not obligatory in Islam. In a reverse scenario from her peers who take on the veil during their medical training, this particular student ceased wearing the niqab upon her return from a summer research stint in NY.

¹⁰⁶ Collective noun and adjective applied to women who wear the niqab.

Another student temporarily resorted to wearing the hijab instead of her niqab while stationed at NYPH because she was informed that hospital security would stop her at the entrance and take it from her, returning it only as she exited the building (pers. comm. 29 March 2011). These scenarios provide some insight into the practical problems females encounter when trying to adhere to perceived orthodox Islamic virtues within institutional contexts that are saturated by the demands of a secular existence (Mahmood 2005: 83).

Medical school ethnographies point to the fact that students occasionally become estranged from their family and friends on account of the intense acculturation process that they are subject to (Sinclair 1997; Mumford 1970; Becker et al. 1961; Merton et al. 1957).¹⁰⁷ They begin to communicate in a shared language, “Doctorese”, and share the same reference points demarcated by their training. Medical students not only spend an inordinate amount of time together, but also commiserate and support each other as they progress through the varying stages of the medical programme. This support often comes in the guise of humour, sharing personal anecdotes and discussing the problems that they encounter on a daily basis. In other words, students undertaking such an intense and stressful programme of study tend to bond with their peers because they can relate to each other.

In a bid to protect their piety and familial honour, from the onset of puberty, unrelated males and females in the Gulf are socially secluded from each other. This gender segregation is evident in domestic and public architecture that incorporates gender-specific entrances and clearly demarcated male/female zones. Malika’s non-medical friends have purportedly been long hidden away and protected through this social arrangement.

¹⁰⁷ A poignant example of the gulf that begins to form between medical students and their lay friends is apparent in a “thread” of messages that appeared on Facebook when a student posted a status update informing her friends that she was “waiting for the match” (i.e. medical residency match), to which three of her friends inquired about her interest in the upcoming Real Madrid vs. Liverpool football match.

Thus, the casual nature of friendships that proliferate between the sexes inside the medical school is another issue for Malika. While she can understand the dynamic that exists between herself and her male counterparts within the boundaries of the educational milieu, it is difficult to make sense of it beyond the walls of Cornell or HMC, particularly when she compares herself to females who are not attending the college:

Malika: When I go back home to my sisters and my cousins, all the female people I have in my family...you feel like they're not exposed to males and they are so protected and they're just like diamonds, who've never talked to a male. No male had ever, you know, humiliated [joked with] them for example, or said something wrong to them...I feel like I'm not as valuable as them, you know what I mean? Because they're just so protected, and once they get married, that'll be their first exposure, they're stuck virgins, you know what I mean? But for me it's not, I mean, if I would get married it's fine, so what? If I [were to] get married, this guy would [feel compelled to] convince me that he's better than the others, you know what I mean? But for them, they don't have to do that because that is the first male [they'll] ever see so they're going to see him as the best one, I guess. So you feel like, I wish I just like them, you know what I mean? Because when we go to the hospital for example, you have to examine every single patient regardless. Like I touch this guy and that guy, and that guy. Then when you go to them [her female family and friends], all of them haven't even touched anyone in their life, not that guy in the street or that guy... no one. I don't know why, but I feel like I'm kind of lowered because I feel like I'm exposed to everyone. I'm not as new as them, you know what I mean?

Tanya: I understand what you're saying. They are surprised when they hear what you do at medical school.

Malika: Oh, they are. Sometimes I feel like I'm ruining them, seriously. They're like, "Oh, my God! What are you talking about?" I'm like, "It's okay. It's nothing." And they say, "Oh, God, we don't want to hear." And I feel like I'm ruining them. Like when my sister comes and tells me, "Do you know that this goes inside this?" I'm like, "What do you think? Yes, of course!" and she's like, "How did you know that?" Of course I know that [and waives her hands emphatically in the air]!

Agitated, Malika removes a hair clasp spilling her dark hair onto her shoulders as she leans forward and continues...

Malika: I remember we went camping and all the girls were sitting and talking about me in anatomy and they're like, "Okay, so when you do anatomy, they give you female patients?" I said, "No, they give you any patient... not specifically females or males, and even if they give you female, you still have to go on practice on a male, if you're doing the male genitalia." They're like, "What are you saying? A male body – what?" "It's like of course, I studied that, I have to do it." "Oh my God, you did it? How did you do it?" "What do you want me to tell you about? Do you want me to tell you about the cupping part or what exactly?" "Don't tell us anything, that's so bad!"

She pauses and looks down at the table.

You think that you're like a slut or something because they look at me like, oh, my God, you're totally ruined, you're totally bad because you see everything and you touch everything and you do everything. Like you're not even a girl anymore. I feel I'm more ruined than my mom, I don't know why but then, if you think about it, you're a doctor.

Tanya: So you can think about it rationally here in the Cornell environment?

Malika: Here, yes, but when you cross out of here [Cornell], everything changes because you remember how you used to be when you look at them and you think... Oh my God, I feel like... you're going to laugh at this... I feel like I'm forty around them. Even my mom, she says, "I feel like you're older than your age", because of my knowledge. I'm 20 and my mom thinks like I'm 30 or 35 or 40, because every time she [asks] me something, I [have an] answer. Like yesterday, she asked, "Should your auntie do a spinal tap because she is pregnant?" "Yes, she should because they're going to block this and that and they're going to give her this and that," and my mom she's like, "Did you have six babies before or something and I didn't know?!" I said, "No mama, I just attended one lecture and I know it." They look at you like you have all this knowledge because usually anyone would [only] have this knowledge after experience [of pregnancy], of course... but then they visualise you older than your age because of your knowledge and this is so bad because they give you more responsibilities and they forget that you should have fun. Like every time I go to my grandmother's house, when I sit with them, they feel like there's this old lady sitting there. And when you [loosen] your hair or you wear a dress or put makeup or something, they'll look at you, and say: "You're a doctor, you shouldn't do that!" So, what

kind of doctor should I be like [she says in exacerbation]? Old and ugly?

Despite her caveat claiming that medical practices escape religious or cultural censure, Malika's preoccupation with "being ruined" or being "lowered" as a result of her exposure to male bodies within this realm challenges this notion. The fact of the matter is that what she is exposed to inside the medical milieu does not always stay in situ because sometimes she opts to talk about her experiences with lay females in her social world. Malika's actions are normally confined to highly restricted settings, and for the most part evade public scrutiny; in breaking her silence, she discloses the precise nature of her interactions, in particular, revealing an in-depth knowledge of the opposite sex. Her companions' reading of a hitherto unseen sexuality onto Malika's body is accompanied by a display of disbelief and horror. Such a response leads Malika to reflect on her actions and in so doing undermines her confidence in the purported innocence of these male-female encounters. Yet to examine these interactions in a highly conservative Islamic setting bereft of the American academic social context obscures her reality. The females who judge Malika's shocking revelations are themselves products of a strictly segregated environment, pegged on a particular understanding of cultural mores and Islamic notions of female modesty.

How the American educational transplant sutures onto the logics and grammars of Malika's world is revealing. That Malika likens her female companions to diamonds is significant. Highly valued commodities, diamonds are the essence of purity in that they are unflawed. She on the other hand refers to herself as being "ruined", defiled by her ubiquitous exposure to men in her medical capacity. Further, the knowledge she acquires as an unmarried doctor-in-training – that of male anatomy, sex and pregnancy – is akin to that which only prostitutes or married women come to know

through experience.¹⁰⁸ Her experience transgresses normative sexual practice, imbuing her with a sexual knowledge that does not corroborate her status as a good Muslim girl. In the Gulf, an unmarried female is commensurate with an asexual being. Hence, she complains of feeling “like a slut” having “seen everything, touched everything and done everything.” Malika’s sense of personhood is altered because of her gender digressions during her medical training. Even though she is able to rationalise her contact with male bodies under the guise of medicine, she still feels that she is sullied in the process of becoming a physician.

While other Qatari females spoke of the constant need to be vigilant and to protect their reputations within the medical college, it is difficult to ascertain just how representative Malika’s dramatic and emotionally-charged reaction is to that of her female peers. A student from what he describes as a “very conservative family” told me that several of his aunts are doctors and that societal reaction towards them was quite positive.

Marriage prospects

All this is not to say that Malika will be unsuitable for marriage – in fact contrary to the views of some medical students at WCMC-Q who believe that in opting to become a doctor may mean forfeiting the prospect of getting married – she is confident that she will marry. Her compromised status, however, will require any prospective husband to be understanding of her previous exposure and intimate knowledge of other males. No longer in possession of a virginal gaze, Malika suspects this may prove intimidating for a potential suitor who may feel that he has to “convince her” or measure up to those males she has previously encountered.

¹⁰⁸ Prior to being discharged from the hospital with a newborn child, it is necessary by law to show a marriage certificate (but not an approved car seat as in the US). Failure to produce the document can result in a jail sentence or deportation from Qatar. When I first arrived in Qatar a medical examination was mandatory. The woman in the queue in front of me was asked if she was married. Unlike me, a married female, when the woman reported that she was single, the nurse behind the desk did not ask her if she was pregnant as if it were inconceivable that a single female might be pregnant.

There is a prevailing myth amongst students and local doctors in Qatar that female doctors do not get married. One doctor assured me that I would see a preponderance of single females at HMC. Unfortunately, there was no data available to support or contradict his assertion. Five medical students became engaged during their training and a significant number became engaged upon or shortly after graduation. It is worth noting that all those who became engaged are marrying individuals who are not involved with the Cornell enterprise. The mere fact that marriage prospects were mentioned on a number of occasions, however, warrants discussion.

A Qatari student explains that although she is keen to become a consultant, her professional aspirations, “will not be at the expense of having a family. I can do both. It’s not like being a working mother in the US, here our big [extended] families support you in raising your children and which means you to achieve both.” She legitimises her career ambitions through assurances that it will not detract her from her principal role as prescribed by Islam – that of becoming a mother.¹⁰⁹ Her assertion notwithstanding, a male student told me that many of his female peers that he once regarded as “very independent and driven” because they wanted to become surgeons “are now [four years later] looking for less urgent and lighter residencies which are more compatible with raising a family”.¹¹⁰

Though resigned to the idea that their course of study may provide some obstacles, both sexes are candid about their desire to be successful partners, parents *and* doctors, expecting to marry at the earliest opportunity. This is not surprising given the emphasis placed on the primacy of family and marriage in the social context of the Gulf where it is common for parents to arrange marriages for their offspring at a relatively young age.¹¹¹ Occasionally, these are consanguineous marriages, a cause of concern to some of the WCMC-Q students. One male student explains that

¹⁰⁹ For a Turkish parallel see Göle 1996: 100.

¹¹⁰ For example dermatology and family medicine have set hours and no on calls.

¹¹¹ WCMC-Q students have said that while this is the trend amongst their family and friends, parents of medical students support the delaying of marriage until after the degree has been obtained.

because they are now in their twenties, most of their parents are beginning their search to find a good match. He highlights some of the most pertinent issues:

They want us to marry someone close from our relatives and that is something we're not going to do because after [now] knowing lots about genetics, it's not really good, so we're objecting to that. At the same time, our parents probably won't allow us to marry someone who went to co-ed school or stuff like that. So [you] see there's sort of a conflict there.

Like this student, a few of the medical students from traditional families report having informed their well-meaning parents that they will refuse consanguineous marriage proposals on the basis that they are cognisant of potential birth defects arising from such pairings.

Female students frequently laud the “achievements” of the two married students attending the college and spoke of their own pending “expiry dates”, the so-called age that one is deemed unmarriageable. While the specific age varies from one family to another, it tends to be a good measure of conservatism, whereby young brides (teens to early twenties) tend to be more common in “traditional” families.

Despite these pressures, male students admit that the length of medical education renders it difficult to afford a proposal much less be in a position to adequately support a spouse emotionally or financially during their training, particularly when a substantial part of their training takes place in America. Such a scenario would demand a new wife to accompany her doctor-in-training husband to the US where she would then spend much of any given week alone while he undertakes his intensive residency training in the hospital. It would require the spouse to be uprooted from the support of her social network forcing male students to question the ethics of subjecting a potential partner to such a solitary existence.

When I return to Doha two years later, however, a male student informs me that his peers are becoming increasingly anxious about their marriage prospects and that

many of them are beginning to think that marriage right after graduation is the most opportune time. Unlike a Syrian medical school where the majority of students would be Syrian or a Jordanian college full of potential Jordanian matches, he explains that the multicultural composition of Cornell means that students have fewer opportunities to meet suitable partners (i.e. of the same nationality, values, beliefs). Having just returned from his residency interviews, the student mentions that he had visited some of the males who had graduated the previous year and were currently in residency programmes in the US. He reports that they are “alone and miserable”. The demands of the foreign residency and the absence of community networks leave them with little time to meet potential partners and so several of them “have their families looking to arrange marriages for them with girls from their hometowns.”

Female students also comment on the perceived incompatibility of a conventional marriage and their Cornell training. One female confesses that:

Even if you did want to stay here [Qatar] because you wanted to get married you'd never dare say it, not even to a female professor. They would think that it is backwards and that you are not serious about a career in medicine. Marriage is a big unspoken issue that we can't talk about. Take the Qatari population for instance – let's say if there are four hundred thousand of us, there are only so many that would be appropriate for marrying. Before, in my mother's generation women married around 25—26. Now it's back to 18, 19 and 20. Like 22 would be considered relatively old. Plus, if you go to the US and come back at age 26 or 27, which I'd be, I'd be relatively old. Most guys are getting married at about 24 or 25 to younger females. Many “educated” females, including my cousin who is at Texas A&M are getting married younger at age 18. What if I risk [my] chances of not getting married? I want to overachieve, but I don't want to end up with an empty house or something like that!

While informants of both sexes cited different trends in marriage patterns, all acknowledge that an age upwards of twenty-five is considered old, particularly for females.¹¹² However, age alone is not the only significant factor. Whether a female

¹¹² Some informants suggest that the trend is for Gulf Arabs to marry in their late teens and early twenties. Others maintain that early to mid-twenties is ideal. Individuals whose parents did not pursue secondary or postgraduate education are more conservative and tend to cite the former.

attends a coeducational institution and spends time alone abroad also becomes relevant. A female elaborates:

Some families do not like girls to have gone alone by themselves [abroad]. That's like many families. Some would say "fine, you don't want that kind of man anyhow." But it's not necessarily the man that chooses here. The mother has [a] big impact in choosing the wife of her son. Even if the guy was sophisticated and wouldn't mind, the mother will have to accept it. But another issue is that men [are] married by the age of 25. Like if you are 27 [and] non-married, [you] will be relatively old. If you're 26-27 you will be pressed to get married. By the time I come back, people my age would have been already married. It's a big issue that they [Cornell] just don't take into consideration.

Their statements bring several culturally bounded dilemmas to the fore. A decision to leave Qatar for an extended period is perceived to seriously hamper a female's chances of marrying a Qatari male. In addition to the paucity of suitable partners,¹¹³ advanced age upon return from residency, societal pressure to marry young and essentially being out of the selection pool during their absence, what is most striking is student reluctance to discuss these issues with Cornell faculty. Amongst my female informants – and especially those reared in conservative Gulf families – there exists a profound fear of jeopardising potential marriage prospects while in pursuit of an American residency training. Students are reluctant, however, to voice their concerns to Cornell administrators for fear of being "culturally embarrassed". In fairness however, students choose to study at Cornell of their own accord and Cornell cannot be expected to account for all of the cultural contingencies that arise at the Qatari campus.

During my time in the field, WCMC-Q faculty and administrators seemed to work on the presumption that their graduates would automatically want to pursue residency

¹¹³ The HEI contract signed by Qatari students states that the funding body must be informed if a female marries a non-national during the course of her post-secondary training. Failure to disclose this information may render her ineligible for free tertiary education and her financial scholarship may be withdrawn. The general expectation is that Qatari females will marry Qatari males, otherwise government permission must be sought. Marriage to a non-national can result in a loss of benefits. Such restrictions drastically reduce the pool of eligible bachelors with whom female students can be matched.

programmes in the US – “to get the complete package” – irrespective of the social framework operating outside of the college. However, two years later I have been informed that this is no longer the case as long before the residency process begins, Cornell now has its students fill out a form indicating where they intend to pursue residency so that the college can support them in their decision.

Several of the Western faculty members are single which gives rise to the impression that “professionals”, especially the ones who delay marriage, are considered to be more serious about their careers. During the first match, staff openly conveyed their disappointment regarding certain students’ decisions to remain in Qatar to pursue Arab board residencies. After the results of the match were announced, I heard faculty members make the following statements: “What’s the point in obtaining a degree from Cornell if you don’t get the US residency to go with it?”; “The degree is nothing, a US residency is everything!”; and “What a waste of six years!” Such comments suggest that faculty do not view a stand-alone Cornell degree to be of any advantage without a US residency training to support it.

With the exception of a few of the students (mostly female), however, the reality is that the majority of students are intent on pursuing American residencies, ideally at academic medical centres. The overwhelming institutional message that students receive is the expectation that career will take first priority, contravening normative social practices in their more immediate Gulf setting. This may reflect a case of “being lost in translation” whereby the contemporary Western notion of “professional career” does not convey the same meaning in the Gulf setting. It is worth remembering that “career” as a concept is relatively new in Qatar, as the nation only embarked on their modernisation project a few decades ago.

When students first applied to WCMC-Q, many of the students educated at Arabic-medium schools were under the impression that the option of undertaking their residency in Qatar at an American-style hospital was going to be an available option. While this will be the case in the future, Sidra the new teaching hospital is still under

construction. As stated in the introduction, and again in Chapter 3, the vast majority of students admit that the fact that they could obtain an American degree whilst remaining in an Arab setting close to home was an overriding incentive for selecting WCMC-Q in the first instance. For some, opting to pursue residency training abroad in an alien environment for a number of years, away from the support of their families, seems a ludicrous decision. One female articulates her concerns about completing her residency training abroad, “It’s not a choice to go and live somewhere alone without someone with you. And, if you think about it, I would be so selfish if I go to my father or my husband and [say], “Excuse me, you have to come with me because I’m finishing my career.” For females reared in relatively traditional families, the absurdity of such a decision is compounded by the fact that they might be unchaperoned for the duration of their American training. Although financial provisions are available to fund a *mahram* to accompany a female student while she pursues training abroad, a few girls said that they felt it would be unfair to deprive their respective families the presence of the designated male for a protracted period.¹¹⁴ The three-month subinternship period is a mandatory part of their curriculum. One female justifies this NY training stint as a case of “necessity overriding obligation” paralleling the juristic principle that necessity makes lawful that which is prohibited (though this reasoning did not seem to apply to the UTA examination discussed earlier). Thus, for some the choice is clear, there is no alternative but to undertake their residency at home.

Despite the pervasive feminine fear *inside* the college of being stigmatised because of their medical training, my conversations with people *outside* of the college contravened this assertion. Medicine is generally regarded as one of a limited number of occupations considered desirable and suitable for women, thus females who pursue medical careers seem to be highly esteemed and considered to be socially valuable.

¹¹⁴ A *mahram* is a male chaperone who the woman cannot marry according to Islamic law (i.e. brothers, fathers, uncles and grandfathers). Funding is also available to spouses and children of Qataris studying abroad.

Reconstituting one's identity

Gallagher and Searle point out that, “‘Western medicine’ is usually taken as a sociocultural constant...internally cohesive in itself and relatively immune to pressures emanating from the traditional culture” (1984: 210). Unlike the impervious medical enterprise, medical students based in Muslim-majority nations *are* subject to a host of societal pressures. Therefore, WCMC-Q cannot be viewed in isolation of its Arab and Islamic context where, perhaps to a greater extent than in the West, students’ actions are dictated and refereed by “...criteria of social responsibility and the display of appropriate respect, deference, and authority according to the sensibilities of [Qatari] male culture” (Gallagher and Searle 1984: 215). This particular setting, characterised by its patriarchal culture, warrants specific attention to the impact that familial influence and kin obligations have on how this first generation of home-grown medical students are having to navigate their way through their American medical training.¹¹⁵

Paralleling an earlier situation documented in Saudi, the American-trained physicians’ status is still in flux in Qatar:

The role of physician is an as yet unstabilized cultural innovation. This is not to say that the physician’s function in society is not understood or appreciated, from the standpoint of the patient. Rather, what is still indistinct and at cultural risk is the motivational complex activated in the “making of a physician” – the formation of a professional self-concept as distinct from a familial identity, and the parallel separation of the professional role from diffuse family connections, which occurs among medical professionals in the West (Gallagher and Searle 1984: 216).

WCMC-Q students are simultaneously trying to attain a modern American professional training whilst attempting to comply with their Arab-Islamic traditions.

¹¹⁵ As time goes on, it is likely that the college will become more embedded and the American training will become less novel. As the community becomes better acquainted with the institution and its practices, it may be that many of the issues discussed above will wane and become less problematic. My observations and continued communications with students as they progress through their training reveal that many of their initial “knee-jerk” responses to certain issues change or become more moderate in the latter stages of their degree (e.g. respecting a minor’s right to privacy).

This involves valiant attempts to mediate binaries: modernity and tradition; the familiar and the alien; familial and professional identities, the old and the new; the East and the West (Gallagher and Searle 1984: 218). Balancing “traditional” obligations along side the knowledge and technical training that inhabit the highly circumscribed arena of medical practice is no small feat. Thus, the novel conditions and modes of practice assembled in the educational transplant infuse the student body with forms of knowledge that may be perceived as deviating from customary expectations. A student is forced then to incorporate his/her new medical persona within a host body that is simultaneously shaped and disciplined by modes of Arab and Islamic morality.

The psychosocial issues that some organ recipients grapple with posttransplant resonate with the ethnographic vignettes of the medical students. Transplants alter bodies and often result in the recipient questioning his/her identity because he/she has appropriated a foreign body part. While most medical students at WCMC-Q report similar shifts in identity, those reared in Arabic-medium schools are more inclined to express disconcertion regarding the transformations they see in themselves. This is because they envisage their newly acquired medical identities to be at odds with pervasive Arabic-Islamic expectations and traditions that are firmly embedded in their social worlds. Ultimately, the tensions encountered in these dichotomous arenas have a transformative impact on the students.

Though small in number, the emergence of indigenously trained “American-style” medical practitioners in Qatar provides a unique opportunity to observe how individuals converge projects of modernity with their cultural mores and values. In the next chapter, I turn to an examination of how modes of practice generated in the US and transplanted to the Gulf manifest themselves differently in the clinical settings.

CHAPTER SEVEN

Emerging Professionals

“At the hospital, I become the servant of a person who is ill and all my energy is focused on helping them receive the best possible care. I have to put on my absolute best professional behaviour.”

- 3rd Year Qatari student

For students at WCMC-Q, medical knowledge is disseminated in two main venues, the American medical school where they are taught the science of medicine and the Arabic teaching hospital (and American hospitals in the latter stages of their training) where they initially learn how to actually *be* doctors.

When I returned to live in Doha two years after the conclusion of my fieldwork, I found myself “primigravida” with twins (medical translation - first pregnancy). Despite having studied the Qatari medical system, up until then I had no experience as a patient in Qatar. Encouraged by glowing student reports about the calibre of physicians they trained under, its recent refurbishment, JCI accreditation and its capacity to deal with complications (ranks fourth largest Obs/Gyn department in the world with approximately 16 000 deliveries per year), I initially contemplated going to HMC for my pending delivery.

When I begin to explore my options (being an autonomous patient and all), I am confronted with a hospital culture that is foreign to me. Although it is the primary locus of WCMC-Q’s clinical training, the modes of practice are very different from that offered in private clinics. To begin with, once in labour my husband will have to drop me off at the entrance to the women’s hospital and I will not see him again until a few hours after the birth. Men are not permitted to attend the birth in the delivery suite. Second, women who have given birth at HMC inform me that delivery by caesarean section is not a foregone conclusion just because one is having twins (in

line with “global practice” in the UK and North America). A soon-to-be WCMC-Q graduate explains the hospital’s rationale:

In a pregnancy scenario involving twins plus any sort of possible complicating factor (e.g. primigravida mum, previous complicated/prolonged labor, previous C-section, large kid, small pelvis, age) few physicians in Europe or the US few would elect to deliver twins vaginally because of the element of unjustified risk involved. This is what we are taught at Cornell by faculty who are unfamiliar with local realities. HMC serves a different population. In a context where women have one or two kids, caesareans are not problematic. Due to the risk of uterine rupture, the American College of Obstetricians and Gynecologists recommends that a woman not have more than three C-sections. A scarred uterus closes doors as it usually commits females to future C-sections. Here it is not uncommon to have twelve kids (he had seen a woman who had been pregnant twenty times) so doctors go out of their way to avoid conducting the procedure on the basis that they want to preserve the woman’s childbearing capacity. If a Western woman comes to deliver her second or third child (assuming there are no complicating factors) and says that this is going to be her last kid and wants to have a C-section, her maternal request will be granted (reasoning being that few Western women have more than three children). Physicians will, however, try to talk a Qatari girl out of it. The more likely she is to have more kids, the more effort they will put into trying to convince her to attempt vaginal delivery. Though it may seem patronising in not fulfilling a woman’s desire for a pain-free C-section, their refusal is actually to the benefit of maternal health in the long-term. Doctors know that their [Arab] patients are going to keep coming back pregnant.

He assured me, however, that on the basis that there is a strong medical indication – primigravida with twins (he tactfully refrained from mentioning my advanced age as a risk factor), a C-section would definitely be carried out at HMC. Our discussion not only underscores the difference among the medical population (e.g. their needs and perspectives), but also serves as a useful window onto the cleavages that emerge when student doctors’ medical training is applied in a non-American clinical environment.

When I enter the corridors of the Women's hospital at HMC I am confronted with a sea of black due to the high volume of women dressed in abayas and wearing niqabs. I am disoriented as the halls are poorly sign-posted and the few that are, are in Arabic. Unfortunately, my knowledge of Arabic vocabulary does not extend so far as to include medical terminology for gynaecology, obstetrics or radiology. I speak to a woman at a desk who tells me to be seated. Compliant, I sit down and proceed to wait for what seems like an interminable length of time. As I wait, not fully comprehending what system is being used to determine the order of patients, it strikes me just how different this Arabic clinical setting is from that back home, a site so integral to the training of WCMC-Q's American-style doctors. I cannot help thinking that the interaction of medical cultures at play in the Qatari clinical setting and the Cornell doctors generated in it serve as a good exemplar of Fischer's emergent forms of life.

Western-style hospitals and medical practice are becoming ubiquitous as a result of globalising processes. Biomedicine is "becoming the regnant mode of healing" because of the globalisation of market economies, the circulation of medical equipment and the dissemination of Western culture (Finkler 2004: 2048; see also Gallagher 1993). Yet despite being positioned at the frontier of globalisation, Finkler points out that biomedical institutions and medical experts – replete with "cultural baggage" – have largely been overlooked by globalisation theorists. She attributes this to the assumption "that biomedicine and its hospitals the world over are replicated exactly as they exist in the United States and that one cultural setting is interchangeable with another" (Finkler 2004: 2048), much as body parts can be successfully transplanted from one individual to another owing to common morphology and physiology.

To complicate matters, in the case of WCMC-Q, "the new infrastructures, ecologies, and technoscientific armatures of emergent forms of life also constitute...new pedagogies, new ways of doing things enforced by emergent new structures of life" (Fischer 2003: 23). These in turn introduce previously unencountered ethical

dilemmas and challenges in the clinical setting. I contend that the educational transplant (and its concomitant biomedical practices, ethics regime and institutional form) is not devoid of complications as it is grafted onto the Qatari clinical milieu.

As programme pioneers, it is up to the students to define what constitutes professionalism in this non-American setting. In this chapter, I focus on the clinical embodiment of the educational transplant, exploring how the clinical setting becomes a site of contestation as student-doctors put into operation the biomedical practices and ethical stances learned at WCMC-Q in doctor-patient encounters in Qatar. By focusing on the dilemmas experienced by American-style medical students during their clinical training in Qatar, this chapter examines some of the obstacles surrounding the adoption and adaptation of a Western-based medical education model in the Gulf setting. Of course, medical students anywhere face problems transitioning from college to clinics, but here I would like to distinguish between the universal challenges and those engendered by the specificities of the Arabian Gulf. The medical school advocates Western-inspired formal structures of medical governance and patient management governed by Western-style conceptions of medical practice. Yet, some of these constructs are alien and not yet fully comprehended by the local population.

Localisation of globalised medicine

Owing to the discipline's rigorous educational training, specialised knowledge, code of ethics, professional autonomy and self-regulation, the medical profession is perceived to be a "strong boundary-maintaining entity" and therefore, understood to be "a sociocultural constant...relatively immune to pressures emanating from traditional culture" (Gallagher and Searle 1984: 210-211). QF expects the Qatari campus to generate an identical brand of professional – Cornell-trained physicians. The educational paradigm's relative proximity to Western ideas of international medical standards, complete with its perceived "universal" ethical package, is modelled on a prototype located elsewhere. Explicitly fashioned on WCMC-NY,

occasionally the clinical application of the foreign training gives rise to cleavages in the Qatari setting. The programme, specifically established to equip Qataris with Western medical expertise (which involves the inculcation of Western values), replicates and introduces knowledge and practices encoded in the metropole which at times are at odds with pre-existing indigenous modes of practice currently in use in the periphery.

In light of this cross-cultural cloning of all things clinical, two questions arise, “To what extent are the features of biomedical practice impacted as they are disseminated across the world?” and “Does a student-practitioner’s cultural repertoire influence his/her practice or understanding of such medicine?”¹¹⁶ In this chapter, I explore the ways in which student medical practice is reinterpreted as it moves from the American academic venue into the Qatari clinical setting. This analysis demonstrates how “universal” products such as biomedicine are subject to transformations when located in different social spaces.

Despite being trained in American-style best practice, fluent in medical nomenclature and equipped with diagnostic skills, WCMC-Q doctors-in-training are far from culturally neutral in their application of these skills when positioned in an Arabic and Islamic clinical setting. Instead, their actions are modified in alignment with acceptable modes of practice as dictated by their local mentors. Arab students attending Cornell are conscious of these shifts and articulate the necessity of doing so in order to conform to local forms of normative practice. The ways that Arabic students contextualise, appropriate and reconstruct the medical degree in accordance with their own cultural referential frameworks is central to this chapter.

I take the unique dynamics of the Qatari clinical setting as a starting point for the examination of the professional personae that emerge, shaped as they are by cultural particularities of biomedical practice encountered by student-doctors undertaking an

¹¹⁶ Finkler (2004) poses these questions in her study of Western-trained Mexican physicians working in a health care facility in Mexico City.

American training in a non-American setting. I begin with a brief discussion of biomedical practice in Qatar and a description of HMC, the clinical terrain where WCMC-Q students undertake the majority of their requisite clinical clerkships. I then turn to a review of some routine practices of biomedicine as practised within the HMC facilities and conclude with a discussion the role of WCMC-Q students as medical mediators.

Western medical practice in Qatari clinics

Biomedicine is the predominant form of health care available in Qatar. The proliferation of medical instruments (e.g. stethoscopes, blood pressure cuffs, ECGs, defibrillators); a common medical vernacular; and the widespread availability of branded pharmaceuticals are testament to the globalisation and homogenisation of



Figure 11. WCMC-Q student presentation to HMC physicians. Photo: Martin Marion

Finding themselves at the nexus of a US training and indigenous medical facilities in their quest to become professional doctors, WCMC-Q students are sometimes forced to negotiate opposing institutional agendas based on their own cultural understandings. Like many of their HMC mentors, students reared in the Gulf are able to draw from an esoteric cultural palette that is accessible on account of being members of the same cultural and/or religious communities sharing as they do, Islamic beliefs and cultural practices. Having grown up in Qatar or in the Arab world, many of the young physicians-in-training relate to the manner in which biomedicine is practised in HMC health care facilities and initially empathise with patients' expectations, even when modes of practice deviate from those learned at Cornell.

The Qatari clinical setting

Qatar offers a mixture of public and private health care facilities. The state funds the provision of universal health care in the public sector. Fully subsidised medical care in the public sector is vital to safeguarding a healthy labour force for the rapidly changing country. As HMC is the primary health care provider, its physicians and facilities have come to play an increasingly important role in the clinical component of WCMC-Q's medical curriculum. Many HMC doctors hold teaching appointments at Cornell, are involved in the Clinical Clerkships and deliver some of the fourth year electives that occur on Corporation premises.

Infrastructural disparities

Although Cornell has been highly involved in the design of Sidra, a specialty teaching hospital, the college has so far had to rely on pre-existing HMC facilities for the delivery of select components of its clinical education. Once completed, Sidra is projected to be a "world class" health care facility that will serve as the primary teaching hospital for WCMC-Q. A wireless, paperless and filmless facility,¹¹⁷ Sidra

¹¹⁷ Digital imaging will replace x-ray images entirely.

is being built to specification using the “highest international standards in patient care, teaching and research” (Sidra 2009). Meanwhile, health care facilities in the public sector are in the process of being technically upgraded and refurbished, if not replaced altogether.

WCMC-Q students currently undertake a portion of their training in a public hospital infrastructure that at first sight appears outdated, poorly maintained and as one student bluntly described it, “designed to deliver old-fashioned health care”. On occasion, the absence of state-of-the-art equipment (the assumption being that equipment will be as readily available as it is in NY), combined with poorly networked facilities,¹¹⁸ means that students are not always able to apply practical skills acquired at Cornell. Instead, they take their lead from local mentors, acquiring a range of practical and alternative modes of practice in lieu of high-tech tools.¹¹⁹ In class, a visiting faculty member acknowledged some of the inconsistencies she had observed and their implications for students who were about to undertake subinternships in NY:

All the systems you learned in Doha will be of little use to you. All our x-rays [in NY] are digital and not on film. We have electronic medical records... You have 48 hours to learn the technology. Technology is a real issue. IVs are similar, so are blood pressure cuffs, but information technology is something you'll have to get up to speed with very quickly.

That the students can get to grips with these technical systems in a matter of two days indicates that they are not tremendously disadvantaged, but rather, their application of certain forms of knowledge may only occur when stationed in US

¹¹⁸ Now that the nation has become networked (see fn. 102) one can expect to see an increase in the use of IT in the health care sector. In addition to improving efficiency, the use of ICT will address a number of safety issues (e.g. improved legibility of patient orders, creation of centralised patient databank, rapid detection of test abnormalities, patient monitoring, automatic patient reminders for preventive screenings) (RAND 2005: 53).

¹¹⁹ For example, vaginal dilators that are used in the recovery of cervical cancer patients are unavailable in Qatar so students are taught to suggest that patients use varying thicknesses of candles instead.

clinical settings. It also demonstrates the impact technological disparities have on operational processes.

The difference in technological expectations between the American medical school and people involved in the delivery of Qatari health care is especially evident in the clinical domain. Though beyond the scope of this paper, students told me about some HMC practitioners' reluctance to shift from physical examinations to reliance on new technologies for the purposes of diagnostic medicine (as taught at Cornell). Similar apprehensions were noted during an HMC employee's presentation documenting the difficulty of transitioning from paper medical charts to electronic patient records. Both examples serve to highlight "...the legacy of embodied skills and the values placed on specific skills or resources in shaping the uptake...of new technologies" (Bray 2008: 156). Health care professionals' apprehensions may well be manifestations of fear and lack of confidence in their ability to cope with the rapid technological modernisation of the medical domain.

While WCMC-Q is located within a purpose-built high-tech facility, equipped with the latest technology, the transforming clinical facilities at HMC contain a combination of low-tech and high-tech medical equipment. The co-presence of low-tech and high-tech material culture within the Qatari medical domain is indicative of a health care system in the midst of transition. Students seem to equate remnants of older equipment with an outmoded, dysfunctional and inefficient health care system, whereas the shiny gleam of newly acquired apparatus reflects the realisation of state priorities and a new epoch of Qatari modernity.

The physical constraints of Qatari facilities also influence how medical students communicate in a "professional manner". As it stands currently, meeting minimal standards of privacy and patient confidentiality is difficult given the current layout of older facilities. Inapt physicality of hospital spaces comprises only part of the issue; concepts such as confidentiality, privacy and autonomy do not translate seamlessly from the North American setting to the Arabian Gulf.

Medical school as a site of contestation

Designed and delivered by professors functioning within a Western framework, Cornell's MD degree provides training in the "American way" of doing things, however, such practices do not always conform to conventional practice within the Gulf setting. Similarly, students reared in the Arab world arrive at Cornell with beliefs, values and social norms that are informed by their own communities. This means that WCMC-Q students function in situations where both Western and local ideas apply, forcing them to negotiate the co-presence of these alternative ideologies and contradictory practices. Finkler's (2004) ethnographic study of how American biomedical practices are culturally reinterpreted by Mexican doctors who trained at a US style hospital parallels the situation in Qatar:

By and large, the physicians who studied in Salud Hospital were caught between their intuitive cultural knowledge and their medical training. In the majority of cases, the physicians' etiological explanations corresponded to traditional folk conceptions relating to emotions, such as anger, nerves, and fright; to adverse experiences, to environmental and social causes and diet. However, their medical training required them to reduce the cultural holistic notions of sickness to a diagnosis of physical disorders, reflecting biomedicine's mind/body duality (2004: 2045).

Adhering to a biomedical model of medical practice based on "etiology, diagnosis and treatment" (King 1982), for the most part, medically informed understandings of the staff at Cornell and HMC overlap. Where the institutions tend to diverge is in situations involving ethics or cultural interpretations of best practice.

The mores and values that prevail within HMC facilities are consistent with both the staff and patients' Arab and Islamic beliefs and practices, whereas those found at Cornell reflect American ideals and expectations. Constructs such as "confidentiality", "informed consent", "patient autonomy" and "sexual history" are not prominent features in the lexicon of regional medical education and local practice. When medical students attempt to translate these cultural borrowings into

practice within the Arab clinical context, many report difficulties such as resistance from their local preceptors and “looking strange” to their patients. The co-presence of different actors and the range of activities taking place in the clinical setting means that it does not function solely as a scientific biomedical venue, but also constitutes a site of complex kinship relationships, politics, bureaucracy and even as a place of worship (there is a mosque in the hospital). Thus, the WCMC-Q students are involved in an ongoing process of negotiating alignment and disjuncture between their radically different social worlds. In so doing, these students assume disparate personas as they move between the American academic setting and local health care facilities, modifying their performances in accordance with their targeted audience's norms, values and expectations.

Hamad as a site of contestation

According to Wenger, it is within the workplace (in this case the clinical venues) that newcomers begin to adopt professional mores and internalise normative practices (1998). For medical students, this acculturation entails both the acquisition and internalisation of professional mores during the early stages of their training (Good and DelVecchio Good 2000). HMC provides the backdrop to WCMC-Q students' early induction into the profession. That students refer to “Hamad culture” and “Cornell culture” (both between themselves, their professors, as well as in conversations with me), suggests that paradoxes and incongruity exists between their classroom learning and their clinical teaching. WCMC-Q students differentiate between the institutional norms of each learning environment and associate different modes of practice with the two distinct educational venues.

Students are exposed to patients and clinical practice from the outset of their medical training. In Medicine Patients and Society (MPS) – a course designed to convey practical clinical knowledge and skills whilst developing professional identity – students dress in their crisp white coats, attend local clinics and work alongside practising doctors called “office preceptors”. The preceptors are HMC physicians

who hold teaching appointments at WCMC-Q, the majority of whom are Arab and were trained in the UK or in the Arab world.¹²⁰ Serving as role models, preceptors provide grounded experience in “meaningful patient contact”, enabling students to apply knowledge and skills acquired in the classroom in an authentic clinical environment. In the first two years of their degree, WCMC-Q students only encounter practitioners and patients in the Qatari clinical settings, but by third and fourth years, the students are also engaging in clinical practice in US settings. This movement between North America and the Gulf necessitates students becoming bilingually competent in both Arab and American health care systems.

Several scholars have shown that the structure and culture of the teaching and learning environments influence medical students’ development in the form of a hidden curriculum (Hafferty 1998; Hafferty and Franks 1994; Anderson 1992). For my purposes, hidden curriculum refers to that which is conveyed beyond the parameters of the explicit formal objectives articulated by the medical school. In their study of students in a New Zealand medical school, Jaye et al. demonstrate that in addition to learning the formal curriculum, doctors-in-training are also subject to the following hidden curriculum:

Sets of tacit and context specific rules about how doctors should behave, think and feel are embedded within the institutional settings of the medical school and teaching hospital. These rules are socially constructed and modeled in everyday clinical, teaching and learning settings by various practitioners, professionals, patients and students inhabiting this institutional space (2006: 142).

While this observation may seem unremarkable, it takes on a new significance when it is applied to the institutional settings involved in the teaching of an American medical education in Qatar. For unlike conventional medical schools and affiliated teaching hospitals which are closely linked both in proximity and culture (WCMC-NY and its affiliated teaching hospital NYPH are both physically and culturally

¹²⁰ Much of the Arab world has a legacy of British or French medicine on account of colonisation or former protectorate status.

connected), WCMC-Q's American academic setting operates quite differently from its Qatari clinical counterpart, HMC. The institutions involved in this collaborative venture are neither physically contiguous, nor are they governed by similar cultural dynamics. Thus, the tensions within the hidden curriculum that Jaye et al. document in the New Zealand context are even more exaggerated and problematic in a teaching scenario that functions across two different cultures in two disparate locations.

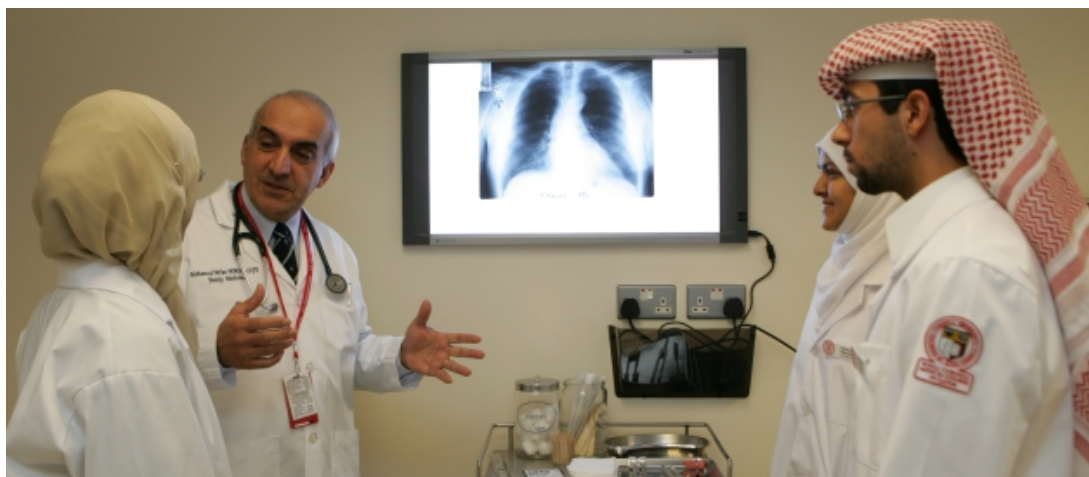


Figure 12. Mock exam room in WCMC-Q Clinical Skills Center

Far beyond the security of the mock examination rooms and standardised patients of the Clinical Skills Center at Cornell where students are introduced to the techniques of medicine, HMC hospitals and outpatient clinics constitute significant sites of clinical training. It is within these authentic settings and under the guidance of local practitioners that the doctors-in-training hone their skills and cultivate their professional identities. As the primary locus of clinical curriculum delivery, institutional dynamics such as the technical, organisational and bureaucratic processes at play at HMC impact on the medical habitus of the Qatari-based students. Wenger contends that institutions – in spite of establishing meticulous codes of policies and procedures – cannot control the outcome of practices that will materialise in response to intrinsic institutional dynamics (1998: 229).

In other words, Cornell can provide its first-rate medical curriculum but it cannot determine how the educational package will be put into practice in front of Arab

medical staff and patients within the Qatari medical settings. Based on their success in securing residency matches in both the US and the Gulf, however, what is apparent is that WCMC-Q students, like medical students documented in New Zealand, have to “learn to perform to assessment criteria while also performing to the normative practices of the working environment” (Jaye et al. 2006: 151). In the present case, the use of American assessment tools and the normative practices of an Arabic/Islamic working environment do not always correspond. While Qatari health service settings are ostensibly based on the application of a biomedical paradigm, student-doctors and their mentors routinely interface with actors who operate outside the parameters of biomedical models and who are often pursuing alternate social agendas. This complex web of relationships includes: administrators, hospital staff, relatives, imams, and patients (be they citizens, labourers or professional expatriates). It is within this clinical setting that differing knowledge paradigms are mediated and acceptable compromises are forged.

Students’ academic learning being counter to onsite clinical realities is not unique to the Doha setting as Jaye et al. point out:

There may be contradictions or incongruencies between various components within the learning environment. This is particularly so within learning workplaces such as teaching hospitals. Behaviours, values and attitudes deemed by the medical profession and medical educationalists to be desirable may not be those that are modeled by clinicians in the workplace and the institutional culture may contain normative values and behaviours that are incongruent with declared graduate and professional profiles for medical practitioners (2006: 150).

While much of what they are taught, including most of the values and ethics contained within the American programme flows seamlessly across the Cornell/HMC divide, there remain a few points of contention.

Do as local doctors do

Whether or not in alignment with Cornell teachings, WCMC-Q students experiment with their medical personas and internalise professional values through mimicry of

habitual behaviours, attitudes and actions as exhibited by their mentors as they work alongside them in Qatari clinical settings. Preoccupied as they are with securing a positive appraisal and/or reference, WCMC-Q students stress the importance of compliance in their clinical training. This is especially the case for students who intend to remain in Qatar for their residencies and who will eventually sit their Arab Board examinations. One student, unsure of where he wanted to pursue a residency, recalls some of his compliant behaviour during his HMC internship:

I remember having to participate in things with my preceptors that didn't have anything to do with work like prayer or going to their houses. Once this patient brought this nasty Bedouin tea to the doctor's office and I declined very politely, but then the preceptor told me I would offend the patient. We'd also often discuss a patient's prognosis with their family without the patient's consent.

Both inside and outside the examination room, to deviate in any way from a local practitioner's mode of practice would be perceived as arrogant and perhaps offensive, particularly if the student shares the same cultural and ethnic background as his/her role model.

Students wishing to pursue US residencies articulate parallel concerns regarding the importance of impressing American-based clinicians. Faculty and students insist that it is essential for WCMC-Q students to undertake their electives in the US if they intend to apply for American residency programmes. As one student put it, "it's almost a requirement". Owing to their IMG status, technically WCMC-Q students are restricted to twelve weeks clinical training leading to academic credit in NY (excludes periods of research and time spent attending interviews in the US). Further, Cornell advises students applying to US medical residencies to secure letters of recommendation from their American mentors as opposed to HMC clinicians because the former are "linked into the network." Faculty and US-bound students perceive American references as more legitimate and influential. In addition, a visiting dean advised students to sit their Step 2 Clinical Knowledge exams earlier than their US counterparts on the basis that "people don't really know our

programme [the one Qatar] but if you have the score then the residency programme knows that it isn't taking a chance on you".

Though a minority, students who elect (or are forced by circumstance) to pursue Arab-based residencies cite a variety of rationale for doing so. These reasons include familial prohibitions for certain female students; chaperone issues; visa restrictions (especially in the case of Syrian and Iraqi students); family commitments; desire to live in an Arab/Islamic country; and concerns regarding marriage prospects. Those seeking HMC residencies contend that "blending in" to Hamad professional subculture and "not rocking the boat" are essential aspects of playing the political game and endearing themselves to consultants who may have a lasting influence on the direction of their careers. This applies to modifying rather a broad range of practices including: utilising family members as interpreters; forgoing preventative screening; examining patients through their clothing; conducting gynaecological exams only on married women (unless there are extenuating circumstances); inserting central lines without using ultrasound; paying attention to vague physical findings rather than relying on tests; drawing fewer lab values; the recruitment of external agencies such as child protection; to name a few. WCMC-Q students are simultaneously subject to both the norms and agendas at play in the American academic setting and the Qatari clinical environment. Under the guise of "following their mentor's lead", however, Arab students are able to circumvent cultural dissonance when confronted with scenarios in which their foreign training mandates an alternative way of doing things.

As mentioned above, the clinical setting is the venue where students learn the art of medicine and how to act like doctors. It is here that students encounter and observe practising physicians whom they model themselves on and where, "medical students learn, internalize and construct normative values and behaviours from what they witness and experience of the medical profession and clinical specialties during their medical training within the disciplinary block of the medical school/teaching hospital" (Jaye et al. 2006: 144). Through imitation of their mentors, students not

only begin to assume a medical habitus and begin to identify with professional norms, but also acquire specific tangible skills. The fact that a large percentage of these pivotal learning experiences occur in a Qatari clinical context has, on occasion, proven problematic.

Although Cornell has been working in conjunction with the Qatari health service providers in order to upgrade the provision of health care, the university's sphere of influence is limited. As most of the clinical component occurs on HMC premises, WCMC-Q students invariably encounter doctors who are not under Cornell's jurisdiction and who are reported to exhibit discordant values and use techniques different from that demonstrated at the medical college. This means that Cornell cannot account for all the environments in which students assume desired professional skills and traits. Many of the practitioners working in HMC completed their medical training in the Arab world and they have assumed the professional norms and incorporated the procedural skills of their own role models into their medical practice.

Nor is the Hamad/WCMC-Q scenario an isolated case of discordance. Medical curriculum planners interviewed in the aforementioned New Zealand study also mention the difficulty of regulating student role modelling whilst on placements in medical environments beyond the confines of the medical school. They cite a range of issues including scenarios in the teaching hospital where students are exposed to: "...subtle messages about the relative importance of courses on professional development, communication skills, and social aspects of medicine. It could also take the form of modeling behaviours and attitudes that were contrary to the stated desired qualities and traits" (Jaye et al. 2006: 148). In addition to instances such as these, Cornell students deployed to Hamad clinics and hospitals encounter culturally-bounded modes of practice and differing patient, familial and professional agendas emanating from the predominantly Arab social context. As members of the Arab and Muslim community themselves, many of the students are familiar with these practices and aware of the reasons behind them; however, they are also conscious

that some of these methods contravene Cornell protocol and what they are learning in their VSLs from NY.

In its Qatari context, Cornell can neither vet all the practitioners the students come into contact with, nor can the institution control alternative modes of practice that its students invariably observe, which have the potential to “undermine the learning objectives of the formal curriculum” (Jaye et al. 2006: 148). Continuity of American medical values and ways of doing things are sometimes hampered because they are not always consistently modelled or reinforced in the clinical setting. Rather, continuity of practice is not usually achieved until WCMC-Q students are immersed in the NY clinical setting during the advanced stages of their training. For instance, the prescriptive form of taking complete patient histories taught at Cornell is radically curtailed in the Qatari setting:

When second year medical students were furnished with a course handout listing questions pertaining to sexual behaviour that they were expected to pose during patient interviews, the Qatari students sitting beside me were mortified on the basis that such queries were not culturally sensitive. Thrusting the paper under my nose and jabbing her finger at specific questions one of the abaya-clad girls said, “These questions are inappropriate. To ask them would make the patient think that you [the student-physician] are crazy. “Are you married? Do you have a child? Are you a virgin?” The order of the questions is ridiculous!” She went on to explain that if the answer to the question about marriage is negative, it would be unsuitable to proceed with this line of questioning, highlighting the unequivocal expectation that an unmarried Muslim female would doubtless still be a virgin. A cursory look at the sheet did include examples of some culturally askew questions including: “Do you have sex with men, women or both?”; “In general, are you satisfied with your sexual relationship?”; “Are you using a method of STD protection?”; “How many partners have you had in your lifetime?” Outraged as they were, the students had failed to notice that the MPS handout did emphasise the need to “individualize the questions for each patient” and the “importance of understanding and respecting cultural, social, ethnic and religious issues”.

Taking their lead from their Arab practitioners, WCMC-Q students regularly report having to omit questions pertaining to culturally sensitive issues such as smoking, sexual behaviour and the consumption of alcohol. Highly contextual and dependent on gender, age and marital status, participation in such controversial activities would constitute an abomination and be totally inconsistent with local expectations.

Questions of this nature are considered embarrassing and offensive owing to the fact that they are incompatible with local values and behavioural norms. In contrast, these activities are regarded as commonplace in North America, thus obviating the perceived need of Arab/Muslim students-physicians to exclude them when taking patient histories. When issues of incongruent modes of practice are discussed, particularly in the first two years of the degree, Cornell faculty assure students that the “medical setting lends validity and safety” to the discussion of personal matters and specific medical interventions. Recognising the awkwardness of some of the types of information that medical students are expected to elicit (a universal hurdle which most doctors must overcome), the students are encouraged to normalise their queries by telling their patients that all patients are asked these questions. The students are also regularly encouraged to “rehearse [their] narrative” so as not to appear uncomfortable when conversing about such issues. As the doctors-in-training progress through the latter stages of their education, these questions become routine and students report becoming desensitised to them.

Hamad culture

WCMC-Q students speak of “Hamad culture” to delineate clinical practices observed in Qatar that deviate from guidelines and modes of practice advanced by the American model employed at Cornell. The example of how to break bad news draws attention to the different cultural context and the differing belief systems. When a patient is diagnosed with a terminal condition (e.g. cancer), many Arab families request that the doctor refrain from telling the patient. At Cornell, students are taught that “full-disclosure” is expected. This issue used to elicit very different responses early on in the medical programme with many of the Arab students supporting the

familial position to withhold the diagnosis from the patient. In an email correspondence, one peer comments on how his Arab peers' stance has changed over the course of their training, "now they seem less likely to go for the knee-jerk response of "it will kill him to know he has cancer."

Another issue that prompted a strong response amongst his Arab peers was that of respecting a minor's rights to privacy in matters of reproduction. "Arab students used to be much more likely to say that the parents have a right to know if their [underage] daughter gets pregnant. Now, later in the stage of medical education, there is less of a difference between their point of view and the one accepted in the West" (Student 2011, pers. comm.) For the most part, the dialectical tensions that arise tend to be ethical, cultural, or procedural in nature and surface during academic sessions with Cornell faculty members, or in casual conversations amongst the student-doctors as they recount situations that they encounter outside of the college.

A scenario witnessed by a Qatari medical student at the psychiatric clinic provides an illustrative case of "Hamad culture". According to the student, an Arab male presented with the complaint that he was plagued by *jinns* (spirits) and was promptly admitted to the psychiatric hospital. During morning rounds a conversation ensued amongst the medical team regarding the status of the afflicted patient that prompted a Muslim physician to ask, "But what if the patient really *is* seeing *jinns*?" After much debate, the consultant declared conclusively that because the patient came to the hospital as opposed to seeking the help of an imam they would treat him as a patient and help in any medical capacity that they could. Different cohorts of students reported similar incidents signifying the discordance of "rational" secular medicine and the Qatari environment.

There are numerous ethnographies showing the various ways in which *jinns* are considered in lay and religious terms to afflict humans, and describing the forms of treatment provided (Littlewood 2004; Younis 2000; Lambek 1993; Boddy 1989). This is a good example of how a belief system transcends into medicine. The Quran

and hadith refer both to the un-seen world (*al-Ghayb*) and the existence of *jinn* so adherents of the Islamic faith are compelled to believe in both. The contested diagnosis outlined above demonstrates not only how spirit possession and mental illness manifest similar symptoms, but also indicates that Muslim doctors can find themselves in conflict between secularised, “rational” biomedicine and their deep-seated religious beliefs. *Jinn* possession is consistent with Islamic beliefs and therefore constitutes a culturally valid complaint within the Arab context. The fact that this conversation took place at all serves as a reminder of the difficulty of isolating Islamic religious beliefs from other facets of Muslims’ lives. Unlike the more secular West where compartmentalisation of education, science, medicine and religion is generally assumed, in the Arab world, one’s belief system is not necessarily so circumscribed. That said, the team’s decision to treat the person as a patient with a medical condition rather than a case of possession owing to the clinical setting suggests that the secularity of biomedicine prevails in this environment.

Not surprisingly, the Diagnostic and Statistical Manual of Mental Disorders (DSM IV-TR), produced by the American Psychiatric Association and used in Qatar, makes no provision for a culturally/religiously-bounded concept like *jinn* spirits. The only reference to religion in the DSM-IV-TR is contained in the following entry:

V62.89 Religious or Spiritual Problem

This category can be used when the focus of clinical attention is a religious or spiritual problem. Examples include distressing experiences that involve loss of or questioning of faith, problems associated with conversion to a new faith, or questioning of spiritual values that may not necessarily be related to an organized church or religious institution (2000: 313).

Use of the DSM presumes the same neuro-social mechanisms which generate psychiatric disorders in Qatar. However, as it is compiled in the US, this entry does not encompass Muslim concerns regarding the presence and influence of *jinn* in the world (nor does it address the forms of possession that occur among certain Christian sects). It seems there is little or no space for religion in scientific medicine, even if it

is embedded within a highly spiritual society. Cornell's formal curriculum does not advise students on how to proceed if confronted with *jinn* possession. However, when the episode was brought to the attention of the WCMC-Q clerkship director, who himself was familiar with particularities of practice in the local context, he advised students that they would "have to accept this because it is part of the cultural repertoire. You have to draw the line between delusions and *jinn*." Despite the widespread acknowledgement of religious spirits (also articulated by some of the medical students), *jinn* are regarded as cultural constructs specific to the Islamic community.

Another concern that surfaced for Muslim student-doctors during the psychiatric clerkships was how to address the issue of suicide. For practising Muslims, committing suicide is classified as a major sin and immediately precludes an individual from entering heaven. As prospective doctors who will ultimately pronounce and determine the time of death, students voiced a concern about whether or not citing suicide on the death certificate would ultimately condemn the patient (to the horror and anguish of their already grieving relatives) to an eternity in hell. In response, the clerkship director reassured the students that an individual's actions are between the patient and God, not the doctor.

During one lecture, a professor mentioned that thirty thousand people commit suicide in the US every year, equating to approximately one person every eighteen minutes. The students appeared genuinely shocked at these statistics. The Vital Statistics Annual Bulletin Births and Deaths produced by the Qatar Statistics Authority does not list suicide as a cause of death. Students draw attention to the fact that contrary to their experience in US hospitals, suicide is never mentioned nor formally declared on paperwork in Qatar. Instead, doctors cite physiological reasons such as cardiac arrest as the primary cause of death.

American knowledge and Qatari clinical perspectives

In my discussions with HMC staff concerning the use of a North American prototype for medical education in Qatar, two critiques were commonly cited. The first was that the biomedical model focused on disease but did not take the patient into account. This is a widely perceived contrast and formed the basis of much analysis in medical anthropology in the 1980s and 1990s (e.g. Kleinman 1988). The physicians' comments refer to biomedicine's reliance on the principles of reductionism and empiricism and underscore the discipline's tendency to privilege an understanding of illness as it occurs within the boundaries of the physical body disembodied from the patient's socio-cultural milieu. Such a prescriptive paradigm leaves little room for cultural or religious beliefs. The second criticism tends to be that the Cornell curriculum – rooted as it is in American modes of practice and patterns of epidemiology – has limited relevance because it does not adequately reflect or consider health care issues specific to Qatar. For example, congenital malformations are a leading cause of death in Qatar and can be attributed to the practice of consanguineous marriage; however, the prevalence of congenital conditions is not reflected in the NY based curriculum where these defects are relatively rare.

A Facebook exchange provides another epidemiological illustration:

12/04/2010

3rd year student: NYPH paradigm: It is never TB [tuberculosis]; HMC: TB is your first differential!

Recent graduate: yes true! at NYPH: you'll be the only who'd manage to make the dx [diagnosis] w/o [without] even waiting for the Cx [culture] when it's actually TB for real or the only one who'd diagnose an egyptian pt [patient] w [with] HCC [Hepatocellular carcinoma] or cholangioCa [Cholangiocarcinoma] w/o even a CT [Computed Tomography] just knowing that they're most likely to be HepC + [positive for Hepatitis C] and you'd look like the smartest med student they've ever had!

3rd year student: btw [By the way], i said TB as one of my differentials n [and] the team just stared at me like i was retarded... 'we dont have TB here' :P

Recent graduate: [a WCMC-Q student] kept mentioning TB, she got stared at but their pt turned out to have it...i had an egyptian pt w progressive painless jaundice...told them EGY [Egyptian] -> most probably Hep C -> HCC or cholangioCA, add to it high ALP [alkaline phosphatase] i'd go more w cholangio, they laughed at me...pt went through 3 wks [weeks] of work up, final bx [biopsy]-> cholangioCA! got a call from the attending abt [about] it...

Faculty members in Doha intimate the need to incorporate more regionally specific examples into the curriculum to render it more relevant to the Qatari context but explain that they are obliged to follow the curriculum as it is taught in NY. Though it may be beneficial, amending the curriculum would mean that they were not replicating the Cornell medical programme as tasked. This brings to light two conflicting agendas: Cornell's remit is to train "American-style" doctors, whereas Qatar is seeking American-trained doctors to work in Qatar.

Commenting on the prevalence of American based examples covered in the curriculum, a second-year student opines: "I believe that we need to understand the foreign [American] setting for residencies, but they need to consider that many of us are going to be returning and working in a Arab context". PBL cases regularly comprise pathologies, scenarios, agencies or practices that are unfamiliar to some of the Qatari-based student population. The imported teaching resources result in students learning more about the predominant pathologies afflicting distant populations as opposed to reflecting regional realities.

Only when students are immersed in Qatari health care facilities do they gain insight into epidemiological issues specific to the region that they inhabit. Then having spent a substantial portion of their clinical time in Doha, WCMC-Q students become familiar with epidemiology in Qatar and employ this clinical frame of reference when initially offering up diagnostic differentials in NY. However, although their

proffered spectrum of pathologies mirrors their patient population back in Qatar, in NY their differentials are often considered “obscure”, “outlandish” or “unusual”. This is evident in the aforementioned Facebook exchange in which the student felt mocked by the American team when she posited TB as a potential differential. But perhaps the most illuminating example of differing modes of practice is evidenced in the doctor-patient relationship.

Student-doctor/Patient encounter

The medical encounter is a culturally sensitive activity. Students training in the US tradition approach the doctor-patient relationship in a manner quite different from that of their Arab preceptors. This is not to suggest that one is inferior, merely that they are different because medical encounters are culturally laden. Based on student accounts, the doctor-patient encounter in Qatar seems to parallel Finkler’s observations of Mexican doctors where:

The physician-patient relationship [is] paternalistic, with an active physician and a passive patient...and...the patients did not find the paternalism objectionable. To the contrary, patients normally interpreted paternalism in terms of the doctor’s concern in much the same way as a parent is concerned about his or her child” (2004: 2047).

Arab student-doctors also have a tendency to minimise the role of patient and his/her autonomy whilst working in the Qatari setting. This is because patients in the Arab world are perceived to be more submissive than those in America. For example, it is unusual for an Arab patient to arrive at his/her appointment armed with sheets of paper downloaded from the Internet and a self-diagnosis, nor is it common for patients to question their physician’s diagnosis/prognosis. This stands in stark contrast to the US where the doctor’s supreme authority is gradually being diminished because of new ideas surrounding the physician-patient dyad. During their training WCMC students are encouraged to conceive of the doctor-patient

relationship as an equal and accessible partnership whereby the physician acts as a “patient navigator”.

Nor does the tone and manner of the doctor-patient encounter readily convert. Arab students confide that they find the efficiency and pragmatism of the professional medical demeanour taught at Cornell to be somewhat impersonal and cold. In the Arab world:

Humanitarian interaction with a doctor is valued as much, if not more, than his or her technical ability or scientific knowledge. The humanitarian nature of this interaction depends on the way the doctor deals with the patient and his or her family and the extent to which the doctor expresses respect for and acceptance of local culture and spiritual norms (Okasha 2000: 18).

In line with this observation, WCMC-Q students stress the importance of casually conversing with Arab patients during the first few minutes of the doctor-patient encounter in order to establish a level of comfort and trust before having the patient open up about personal health issues. Patient expectations combined with the fact that Qatari-based physicians in the public sector are not preoccupied with maximising their billing, translates into longer doctor’s appointments and lengthy waits for patients.

At Cornell, students are trained to initiate the medical encounter with questions pertaining to medical insurance status and drug plan coverage, both of which are largely irrelevant in the Qatari context. Aside from the more obvious differences in attitudes towards religion or conceptualisations of the physician’s authority, the manner and type of questions posed in the doctor-patient exchange are indicative of differences in the provision of health care as it stands in Qatar and America. The universal health care system operating in Qatar stands in stark contrast to an increasingly commercialised one in the US where doctors are often referred to in contractual terms as providers who service clients or consumers (patients). The differences between the two health care systems necessitate that WCMC-Q students

attend a series of lectures with a visiting lecturer for the express purpose of introducing them to variations that they will encounter once stationed in the US:

We don't expect you to understand the health care system until you experience it. We're just laying the foundation for when you come to the US. I'll be explaining the concepts and language of the US health care system that you'll need to take into consideration... For instance, who here has heard of the blue pill?

Despite having been exposed to a purported "identical medical program", this statement demonstrates that an American medical training involves much more than the acquisition of a new knowledge and skills base.

Influence of British medical professionals

As mentioned above, many practising physicians at Hamad (the clinicians whose practice is imitated by student doctors) were trained in the British tradition (be it in the UK or in regional medical colleges), thus giving rise to subtle structural variations in clinical practice. For instance, following local mentors' leads WCMC-Q students sometimes refer to British pharmaceutical brands and use metric measures on patient charts when calculating and prescribing dosages. When practising in America, however, they have to convert to the US customary system of measurement. Compared to the US where preventative medicine prevails in the form of "Well Woman" and "Well Child" exams, large scale screening programmes (e.g. breast cancer screening) instigated by WCMC-Q are only now being implemented in Qatar.

Another difference is that contrary to their American colleagues, British-trained physicians (and the students that train under them) tend to conduct more thorough physical exams and are less likely to rely on expensive technological diagnostic tests to determine what is wrong with their patients. This probably stems from the structure of health care in the UK that offers universal access to health care through the National Health Service (NHS). While reluctance to administer costly tests may

be an inveterate carry over linked to working under funding constraints (a non-issue in Qatar), it may also be indicative of societies that are less litigious than the US. An upper year student who had spent time in both WCMC clinical settings offered the following explanation:

We are taught to order tests because we practice defensive medicine. Cornell-Presbyterian caters to a rich patient population on the Upper East Side of Manhattan where patients are far more litigious than patients in Qatar.

This explanation was corroborated on another occasion when a Qatari student scribbled “US mistakes = malpractice” in my notebook during a VSL. Her comment highlights one of the major differences between working as a doctor in America and Qatar.

Practitioners working in the US are far more sensitive to litigation; therefore, doctors run more tests to confirm that they are not making errors. In the US, all tests and patient communications are supposed to be meticulously recorded in electronic patient documents. The Qatari health care system is following suit, transitioning as it is from paper records to computerised record keeping. The prevalence of medical malpractice for physician misconduct led one professor on the final day of a clerkship rotation to underscore the importance of record keeping: “I cannot emphasise how important it [record keeping] is *especially* if you are working in the US health care system.”

In another off-handed remark, a clerkship director advises her students to refrain from using abbreviations like FLK (funny looking kid) in the event that as future doctors they may be asked to read their patient notes aloud in a court of law. Both statements allude to the litigious nature of practising medicine in the US. In such a system, accurate documentation is essential to safeguarding oneself against potential lawsuits. This contrasts with the Arab world where medical malpractice is rare. This can be attributed to the high degree of confidence and trust accorded to physicians in the region on account of their expertise, combined with the belief that Allah’s will

ultimately determines the outcome of any medical intervention. In the face of adversity, Muslim patients and their families find solace in the oft-heard phrase “*Inshallah*” (translating to “in the will of Allah”), the belief that everything that happens is according to God’s plan, leaving little reason to prosecute physicians. Owing to the fact that causality is subject to cultural interpretation, local perspectives shape medical practice and procedures accordingly.

Accounting for discrepancies between what students are taught at Cornell and what they see in practice at the Qatari hospital, one clerkship director astutely acknowledges that clinical practice is subject to the cultural milieu in which it is embedded, telling his class that, “Where you practice will dictate how you do things.” A practitioner’s mode of practice is largely determined by the structural realities of the specific context. In Qatar medical encounters are shaped by and subject to a number of factors, including issues related to social hierarchies, modesty, gender and morality.

Ethical dilemmas

Ethics and MPS courses form integral components of the medical curriculum and are purportedly designed to render global medical knowledge meaningful within local contexts. Yet, these courses often become a hotbed for cross-cultural tensions as they explore themes from Western medical ethics in an Islamic social milieu. As medical education globalises, the relevance of the American ethics package that accompanies it becomes questionable.

Rooted as it is by science, students can for the most part, engage with the medical curriculum and participate in related clinical practices without fear of contravening their religious beliefs. Cross-cultural differences arise, however, when ethical issues relating to clinical practice need to be addressed and Arab cultural particularities collide with the west-centrism inherent in medical bioethics. Bioethics from the US is premised on the basis that universal norms can be generated through use of

secular, rationally grounded principles in lieu of values shaped by culture and religion. The neoliberal ideology that serves as the foundation for Western biomedical ethics give primacy to the values of autonomy, individualism, self-governance of rational actors, individual liberties including the right to privacy, and freedom to make choices without interference. These values stand in stark contrast to the collectivist values held dear by the Qatari-based patient population that accords primacy to authority, obligations and hierarchical interdependencies (Moazam 2006).

According to Dr. Rodriguez del Pozo, the professor charged with writing¹²¹ and delivering the medical ethics curriculum at WCMC-Q and to Cornell's credit, the medical school had anticipated many of the issues. Their overriding concern was that, "the autonomy-based ethics so prevalent in Western medicine would be alien to, or discordant with, [their] students' traditions and professional values" (Rodriguez del Pozo and Fins 2005: 136). The uncertainties surrounding the universal validity of the Western model were compounded by the fact that the courses had to simultaneously:

...cultivate the knowledge, skills, and attitudes to prepare [their] students to address ethical dilemmas in clinical practice from their own cultural perspectives and also from a North American perspective. And while asking students to consider ethics from a Western perspective...[having] to avoid the impression that [they] were attempting to engage in indoctrination (Rodriguez del Pozo and Fins 2005: 136).

As medicine becomes global and gradually moves towards a more patient-centred model, there is an increasing drive to incorporate cultural competence into teaching frameworks. What this means is that health care delivery now considers sociocultural dimensions, including patients' beliefs, values and behaviours. The quality of health care exchanges is thought to be improved as a result of individualising versus standardising the doctor-patient encounter (Betancourt 2003). In light of the trend towards the promotion of cultural competence in medical

¹²¹ This course was not merely transplanted but rather represents a novel form.

education, one questions whether it is suitable for the medical profession to impose a standardised code of ethics universally? For example, concerns with informed consent, personal autonomy and self-determination frequently espoused in Cornell lectures reflect American notions of individualism. Yet, cultural nuances shape medical ethics so Arab students' interpretations of certain individualistic ethical principles in the more collectivist Gulf setting occasionally differ from those endorsed at WCMC-Q. At this stage the emergent form of transcultural bioethics is little understood.

The fact that policies dealing with informed consent were already in place in Qatar led Cornell faculty to assume that the concept would correspond to what is done in America. At first glance, the HMC policy statement for informed consent that claims to be "a defined process in accordance with the legal, ethical and internationally accepted standards of practice" certainly resembles documents generated in the West, but deviates in some areas such as those dealing with obstetric and gynaecologic procedures. For instance, 5.5.1 Consent to Termination of Pregnancy states: "when there are clear medical reasons acceptable under Islamic law for performing the procedure, the performing physician shall explain the necessity of the procedure to the patient and her husband and obtain their consent individually." The reference to Islamic law, the supposition that the pregnant woman is married and that her spouse's consent is necessary is indicative of the differing value systems at play in the Qatari social terrain.

Bureaucracy

In his documentation of Yemeni efforts at Western-style codification, Messick observes that "state record keeping generally was characterized by its informality, both in the concrete sense that its documentation practices predated reliance on printed forms and the conceptual sense that it was not highly elaborated, rationalized, or standardized" (1998: 34). Qatari state record keeping exhibited a similar

informality preceding recent bureaucratisation efforts. Staffed and advised as it is by a contingent of foreign experts, HMC is importing a Western-style of record keeping not previously in use in Qatar. Consistent with the rise of audit culture in institutions noted in Chapter 3, Western medical culture demands that information be explicit, codified and recorded in writing.

During the course of JCI accreditation, many of Hamad's operating policies and procedures which were in effect had to be formally codified in writing for the first time.¹²² During a lecture that I attended with the medical students, an HMC administrator openly admitted that many of the local hospital staff found this exercise to be, "quite tedious, inconvenient and unnecessary". Aside from the fact that this process obviously disrupts the status quo, the negative attitudes of hospital staff may be attributed to the fact that accountability and blame are much easier to apportion to individual actors once processes are made explicit.

Similarly, Arab students expressed reservations about disclosing too much explicit information during doctor-patient encounters. WCMC-Q students frequently complained that applying American standards of informed consent within the Qatari clinical context was counterproductive, as the following field note excerpt shows:

At the end of the ethics lecture a second year male student who had been sitting next to me stood up and threw his Gap-emblazoned knapsack over his shoulder. Shaking his head he said, "We are smart people. When we are in the States, we will practice the way we are taught at Cornell, but when we work here, we will work according to what is socially acceptable. The patients here do not expect to be informed about all the details. They do as the doctor says...It seems there is a culture all over the Arab world that the more you tell the patient, the more the patient is likely to get scared. They just aren't used to getting so much information. We're going to keep the patients in the dark because that's the culture here. Why are we [at Cornell] assuming that we know what is best for the patient? The idea here is to keep morale up!

¹²² A similar situation exists in the practice of law in Qatar where cases are rarely reported formally and there is no notion of a binding precedent.

The manner in which the medical student expresses his dilemma suggests that he is able to move between two different styles of patient communication and that his approach is contextually determined. This is because knowledge and information are socially and culturally contextualised, embedded as they are in distinctive cultural premises. Yet again, I return to the litigious nature of practising medicine in America. The American proclivity to sue physicians necessitates a need for full disclosure of all facts and risks associated with medical procedures and detailed documentation of all doctor-patient exchanges. Operating within this contentious environment, Cornell stresses the importance of “informed consent” to its students. Within the Gulf context, however, providing large amounts of information can be interpreted as suspicious and adversely misconstrued as concealing the truth. Further, the detailed and intimate nature of American-style questions posed by medical students can both be construed as offensive and convey a sense of mistrust on part of the inquisitor. These culturally specific modes of communication ultimately determine “the standards of disclosure adopted by each society and can thus have a dramatic impact in the clinical sphere, influencing the content and practice of informed consent” (Rodriguez del Pozo and Fins 2008: 275).

WCMC-Q students are caught at the cultural interface between American and Qatari notions of what comprises adequate informed consent. In the US, doctors are obliged to disclose *all* the relevant facts, risks and options associated with medical interventions. At HMC, the doctor is expected to provide “*adequate* information for the patient or representative to make an informed decision on the proposed treatment or surgery” (HMC Informed Consent Policy; my emphasis). Yet, what constitutes relevant, extraneous or comprehensive information is far from definitive. To be under-informed by one’s physician in America, however, is tantamount to violating patient autonomy.

The American need for copious amounts of explicit data pertaining to therapeutic options contrasts with the minimal disclosure of facts communicated to patients (and their families) in Qatar. In the Gulf setting, practitioners articulate fewer details

relating to the particulars of specific treatments, but neither does it seem patients expect to be informed of all such medical technicalities. Despite seeming inadequately informed based on Western standards, several student-doctors told me that their Gulf patients are prone to confusion and heightened anxiety if they are inundated with too much explicit medical information.

As evidenced in the ethnographic passage cited above, WCMC-Q students function as cultural intermediaries when operating in Qatar, constantly trying to adhere to professional ethical guidelines without compromising the local values and norms of their patient population. In so doing, the Arab student doctors walk a precarious line in that they cannot be entirely sure that their respect for local culture is not merely a pretext for bypassing ethical guidelines, or to the detriment of their patients' rights (Okasha 2000: 18). The manner in which student-physicians negotiate informed consent is to defer to their local preceptors' modes of practice.

Ideas of patient autonomy and confidentiality taught at Cornell are also bound up in "inveterate [Western] cultural orientations that constrain the standard approach to moral issues in patient care" (Kleinman 1995: 46). WCMC-Q's ethics curriculum does not correspond to the broader cultural milieu within which the student-doctors operate during their HMC rotations where "social integration is emphasized more than autonomy; that is, the family, not the individual, is the unit of society... Decisions are made not at an individual level but a familial, tribal, or communal level, in the best perceived collective interest" (Okasha 2000: 18). Thus, patient confidentiality is relatively relaxed in the Arab world meaning that it is common for extended family members to be present during the medical encounter and to communicate directly with physicians on the patient's behalf. Medical decisions are not an individual's private matter but rather a family affair and are often implicitly or explicitly subject to sanction by the eldest male family member. For instance, the HMC Policy document for informed consent for minors, incompetent or incapacitated patients considers the patient's legal guardian "based on the rank and order of individuals below":

- 2.2.2.1 Husband
- 2.2.2.2. Son (priority to oldest one available or reachable)
- 2.2.2.3 Father
- 2.2.2.4 Mother
- 2.2.2.5 Paternal Grandfather
- 2.2.2.6 Brother
- 2.2.2.7 Paternal Uncle (priority as above)
- 2.2.2.8 Paternal Male Cousin (priority as above)
- 2.2.2.9 Nearest Male Relative available

In collectivist societies like the Gulf, an individual is, “viewed as sociocentrically enmeshed in inextricable social networks, ties that make interpersonal processes the source of vital decisions” (Kleinman 1995: 47). Nor are these decisions confined to the realm of medicine. For instance, a good number of medical students mentioned that their families were involved in their decision to attend WCMC-Q. Similarly, despite being enrolled in a Western educational programme, Qatari females still had to obtain permission from the appropriate male family member in order to travel abroad. Amidst such circumstances, personal autonomy is sometimes superseded by sociocentric values demonstrating that primacy of the individual is a presumption of Western biomedical ethics that some facets of Qatari society may not entirely relate to.

Differing notions of authority seem to be in effect. The idealised scenario promoted by Cornell in which physicians assume the role of “patient advocate” and “equal partner” in the doctor-patient relationship does not translate well into the Gulf context. On the contrary, whilst on rotation in Qatar, students conform to local expectations and assume a paternalistic and directive role. A fourth year student elaborates:

We are taught to not be paternalistic when dealing with patients, but in Hamad you have to be or people won't understand the gravity of their medical conditions.

In an address to a new intake of first years, a recent medical graduate emphasises the symbolic nature of the “white coat”:

They'll [the patient and family] expect you to help them make decisions that may completely alter their way of living...Do not underestimate the power of the white coat...During the first month of my medicine clerkship, my first ever clinical rotation, I had to take care of a critically ill patient with an extensive medical history. I had developed a very good rapport with the family (the patient's son and two daughters), and they were well aware that I was a medical student. [But] they buried me with questions, requested my presence in every consultation. They even delayed signing a consent form only so that I could attend a surgery the patient needed. It was overwhelming to see family members, all much older than I am, all with greater life experience, and all looking at me to answer their concerns.

The power dynamic corresponds to hierarchical rigidities embedded within the culture and suggests that constructions of authority in the doctor-patient encounter are culturally mediated. Understandings of medical authority are constructed differently so an Arab patient (and family) will defer even to a junior doctor's authority on the premise that “doctor knows best”. Several doctors-in-training told me anecdotes of patients who had come in with scars but were unable explain the type of medical procedures that had been performed on them. Their ignorance suggests that they took their physician's advice at face value and consented accordingly. Again we see how familiarity, trust and authority intertwine – rather than as in the US the patient demanding (or indeed being obliged) to go up the ladder of specialists rather than sticking with the GP who knows them.

Recounting an incident which she had witnessed in America in which a family had “decided to pull the plug” on a family member, a Muslim student doctor contends:

This decision would never happen here. Here, the patient would continue on life support and the family would insist on every possible measure being taken including resuscitation. Do not resuscitate (DNR) orders do not exist here because they not follow Islamic principles.

Unlike the West, neither individual patients nor their families possess any authority as to whether to apply a DNR decision or not. According to one of my informants, in the absence of DNR orders, doctors at HMC routinely practise “Social C.P.R.” whereby they inform the family that “they did everything they could” but in reality, only perform half-hearted resuscitation attempts (e.g. intermittent compressions) if the patient’s condition is considered futile. Again, this demonstrates the authoritative position that doctors hold in the Arabic setting.

This contrasts with the situation in America where patients and their families do wield a voice in whether or not a patient is resuscitated. The student-doctor explained how on at least five occasions in the US she had witnessed mediations surrounding the decision to administer or refrain from life-saving medical intervention. She said it was remarkable how a family could be convinced that DNR is the preferred option following a short consultation with the entire medical team (including various consultants, hospital administrators and family counsellors) during which they are confronted with the reality of the situation. While the US families are yielding to the voice of medical authority too, they have to be consulted thoroughly before a medical decision can be taken.

Professionalism

Formal medical training is considered by many to be a “...form of professional socialization and moral enculturation whereby the profession transmits normative expectations for behaviour and emotion to its novices” (Jaye et al. 2006: 143; Hafferty and Franks 1994). Cornell’s programme is patterned on American expectations of professional behaviour. One of the key attitudes that Cornell’s Medical Program expects its students to demonstrate is the “maintenance of a

professional demeanor in one's work and as a role model for society including the demonstration of an attitude that values timely attendance, punctuality, and reliability in the performance of one's duties" (Cornell website). The term "professionalism" is a catchphrase used prolifically at Cornell. The young students are told that what primarily distinguishes them from their peers at other colleges in Education City is that they are undertaking a "professional" degree. Students are continually reminded of what constitutes professional behaviour including appropriate dress, proper comportment and technical mastery.

The desire for professional legitimisation of WCMC-Q as a full-fledged American medical establishment has necessitated the incorporation of North American ideals of professional behaviour. Sometimes students voiced their disagreement with some of these ideals:

My religion teaches me to be sensitive to the needs of others and I believe this is the core of professionalism. We don't need a course to learn this. My religion teaches me to have a sense of balance, to trust the unknown to God, and to always do your best to help people. These things are what it means to be "professional". To me, "professional" does not mean being detached, or wearing or not wearing jeans, or refraining from becoming attached to patients. I believe that being professional means trying to be a human being and trying to help others in the best way you can. If showing feeling helps the patient, do it. You can pretty much do anything you want as long as it doesn't interfere with giving the patient the best care possible and doing your best to satisfy his/her needs. Professionalism in medicine means putting the patient's needs before your own. Period.

This student is not alone in thinking that her Muslim upbringing will contribute in a positive way to her professional practice. Nor is she the only one to comment on notions of professional dress. Another student was rebuked and branded inappropriate and unprofessional looking for not wearing a tie:¹²³

¹²³ This student cites religious reasons for not wearing a tie in the Qatari setting. Although not all Muslims agree, he understands that a tie is representative of a Christian cross and is uncomfortable wearing one. He did wear a tie during his residency interviews in the US "because it was expected".

This is what I dislike about MPS – the constant emphasis on professionalism. I consider wearing clean and ironed clothes as a mark of professionalism, not a tie.

Professional dress is a contentious issue for some Arab nationals. Cornell advocates professional dress on the basis that it inspires confidence and fosters trust in the medical encounter. At Cornell, professional attire comprises a white coat with smart attire based on Western conventions of dress. Hence, a dress code sensitive to the issues of modesty and that takes national dress into account was only partially implemented. Cornell provides specially designed $\frac{3}{4}$ length, long-sleeved scrubs as an available option for surgical placements (and for use in the anatomy lab), but outside of these settings Qatari females never wear anything approximating trousers for fear of revealing the shape of their body.



Figure 13. Three-quarter length scrubs. Photo: Tanya Kane

Two Qatari males who arrived at class with ties hanging round their necks because they did not know how to knot them told me that they had to recruit the help of a Western peer to help them purchase shirts, ties and trousers the night before as their wardrobes contained only thobes. In the interest of health and safety, females normally adorned in floor-skimming abayas had to replace these garments with long skirts and blouses. Few in number, females who wear gloves as part of their daily attire have to substitute these with latex surgical gloves. Females who wear niqabs continue to do so in the Qatari clinical setting, but as mentioned in the previous chapter, voiced concern over whether or not they would be able to wear this garment when practising in NY (where they would still be visible to their Arab male peers). The only non-contested garment was the coveted white coat, a marker of their emerging medical personas which was worn with pride in specific academic settings (e.g. Clinical Skills Center) and all clinical encounters.

Student interaction in local social and clinical domains

Different knowledge paradigms, social agendas and relationships force students and recent medical graduates raised in the Gulf region to mediate a plethora of expectations emanating from both inside and outside of their professional training. Outside WCMC-Q, the actors found in both domestic and clinical spheres tend to be local or regional and include a high percentage of Arabs, Muslims and native Arabic speakers. Actors' expectations in these two domains converge with the mores and values that Arabic-schooled students were raised with. Many students considered there to be a better fit in these Arab-majority environments and felt more at ease socially. The hospital setting becomes a site of contestation whereby students arrive having been taught one thing at college, but often compelled to practise another within the Arab clinical setting. As recipients of a US model of education and style of clinical practice, Arab students also have to define themselves within the context of their own community. An untarnished professional reputation is all-important in

such a small and insular social network, especially for those wishing to pursue medical careers at HMC. This preoccupation with one's reputation has wide reaching implications both inside and outside of the college.

Clearly, professionalism and some aspects of the clinical encounter cannot simply be transplanted unchanged because these components require a degree of cultural integration. It is apparent that as it stands, the US degree was not intended to mesh onto the Qatari cultural milieu and this comes through in professional modes of practice. While student-doctors always have to bridge the gap between academic practice and clinical experience, more adjustments are required for the American-trained students when they attempt to embed themselves in Arabic clinical settings. In the absence of previous cohorts of American-trained Arabic clinical practitioners, those graduating through Cornell will be required to define a new professionalism – one which navigates the differing standards of conduct of their US medical training and their Arabic clinical practice. As products of this educational experiment, WCMC-Q students are located at the intersection of these institutional expectations. The onus, therefore, is on WCMC-Q students to decide which elements of their American medical enculturation can be dispensed with and what they need to retain of the Cornellian notion of professionalism in the Qatari context where conventional practices and ethical regimes do not always apply. As a group, these pioneering WCMC-Q students are developing their own culture of professionalism in the process of trying to amalgamate their Arabic/Islamic principles and their American medical training.

CONCLUSION

WCMC-Q is an initiative that was promulgated by the East and embraced by the West. It is a model based on international collaboration, the sharing of ideas and the indirect promotion of Western medical ideals. This thesis has considered the implications of transplanting an educational programme far removed from its original social context and cultural framework. Cornell's professional training was designed in NYC and subsequently transferred to Doha, thus the content, ethics, materials, methods and practices are Western products geared towards the demands of the US health care system. The production of American-style physicians in a non-American setting provides a window onto the issues that transpire in the globalisation of education.

Bourdieu (1984) contends that tertiary education cannot be studied in isolation, but rather, must be examined within a broader social sphere. This point is all the more pertinent in an era of globalisation when an increasing number of academic institutions are transplanting their academic programmes to foreign environments where structural factors unique to each social milieu impact the educational experience. This is particularly true of WCMC-Q where students are effectively enrolled in a hybrid programme, that is, Cornell's medical training is designed for an American setting but *experienced* largely in an Arab/Islamic culture.

That the transnational educational experience is possible at all is the result of a complex and diverse assemblage of governmental, institutional and personal objectives and initiatives. This ethnography looks at the social construction of students enrolled at an American university amidst the tensions wrought by local and supralocal factors impinging on the educational experience. University experiences penetrate various facets of students' social worlds and therefore have a tangible impact on their lives beyond the seemingly circumscribed walls of the institution. At the time of my fieldwork, many Qataris were still largely unfamiliar with the

imported institutional form and thus the ways in which medical school experiences transcended and merged with students' lives and identities located beyond the college environs was central to my research. That university and private spheres overlap and require student negotiation seems to be an intrinsic element of college life regardless of location, thus providing comparative scope for ethnographies of higher educational institutes.

Fahy argues that academics should not summarily dismiss the domain of higher education as a subject of anthropological inquiry because of its presumed familiarity and scale (1998: 32). Despite their limited treatment in the corpus of scholarly literature, universities – especially in a globalising world – introduce an abundance of topics worthy of ethnographic investigation and have the potential to make contributions to critical debates within anthropology. This thesis addresses the local and international articulations of academia, global institutions, novel modes of knowledge transfer and sociality, social constructions of student identity, and processes of professional formation – representing as they do, only a narrow sample of prospective issues that could legitimately fall within the scope of anthropology.

Where is Qatar going with all this?

While there exists a colonial legacy of educational systems being imposed upon people, contemporary scenarios are usually initiated by host nations in line with specific development goals, which is precisely the case in Qatar. At the same time, enterprising American institutions (particularly in a post 9/11 climate) are looking to capitalise on new academic populations (taking post-secondary education abroad versus bringing foreign students to America), thus making the venture mutually beneficial for all parties involved. As discussed in Chapter 2, there exists within these academic communities, a notion that in order to remain competitive universities must enter the transnational sphere and only in so doing become a global institution via the establishment of foreign campuses. Recognising the opportunity

of a market as yet unsaturated with competitors, their global expansion is tinged with a sense of urgency. This perceived exigency to establish foreign outposts, however, may prompt universities to move forward with transnational programmes without due consideration of issues such as the multicultural composition of the new student bodies or necessary modifications to curricular content. Although an increasing number of universities are being imported from the West, these pedagogical programmes do not necessarily embrace Islamic values and the predominant Arabic ethos.

Unlikely as it seems, based on the small numbers of nationals currently graduating from the programme, the idea behind WCMC-Q as far as the Qatari sponsors are concerned, is to help nationalise the health care sector by reducing its dependency on foreign expertise and reasserting domestic control of the system. As WCMC-Q students begin to enter the professional domain in Qatar, it seems that the conventional US-based understanding of hierarchies of professional knowledge are being reinforced. Both students and faculty predict that Cornell is producing a small elite stratum of Western-trained medical elite who will assume the top-ranking administrative positions and leadership roles in hospitals and the Ministry of Health (much to the dismay of long-serving *Arab-trained* practitioners, including Qataris who trained in the region, who will be vying for the same positions). If the students graduating from the US curriculum are destined to be the leaders, this points to an emerging hierarchical culture in which who and what counts as a legitimate medical training is narrowly defined.

The governmental Qatarization scheme will no doubt play a pivotal factor in defining WCMC-Q medical students' professional careers on the basis that the state desires administrative posts to be filled by Qatari nationals, especially in the health care sector which is currently staffed predominantly with non-Qatari clinicians. These high-level administrative positions may prove attractive avenues as they will undoubtedly be imbued with status and authority (though endorsement of individuals

will be based primarily on nationality and university degree as opposed to technical merit). The vast scope for involvement in entrepreneurial opportunities, the hierarchical nature of Arab/Islamic society and the potential for rapid promotion of indigenously trained physicians (possibly prematurely) may well result in Qatari medical students pursuing different career paths from their NY peers where upon graduation the majority of American medical students go on to pursue life-long careers in clinical practice. Despite acquiring a “universal” skill set and being trained in the American medical tradition, divergences in clinical practice and professional career paths may come to mirror cultural particularities of the Qatari medical landscape. The medical role in Qatar is after all a product of a social context that simultaneously aims to modernise its provision of health care without relinquishing Arab/Islamic conventions and values.

The US-Qatari venture summons forth a unique constellation of social, cultural and ideological expectations. Through WCMC-Q’s new and complex assemblage of institutional networks, novel use of technologies, and tangles of ethical and moral challenges, inconsistencies have come to the fore. Incidents of ethical and cultural dissonance inevitably arise and when they do, the onus is on the students to adapt and fortunately, their pragmatism prevails.

While the curriculum assumes that medicine and science are global in nature, its students, patients and their corresponding cultural and moral concerns are largely local. To a certain extent, as evidenced by the issues articulated by the students in Chapters 5, 6 and 7, a clash of Arabic and Western cultural ideals does exist on some personal and clinical levels. This requires a student’s sense of self to be adjusted in order to accommodate the competing demands of the American academic training and his/her Arab social world. Yet, while Islamic values certainly inform medical student conduct, there is no compelling evidence of a specifically Islamic or Arabic imprint on the scientific facets of the imported curriculum. Nobody has been alienated by the science as such, suggesting that biomedical science is for the most part both mobile and replicable. Unlike scientists working in sterile labs, however,

physicians and doctors-in-training necessarily apply their knowledge. As knowledge moves from the “bench to the bedside” – and especially in a scenario when it is transplanted to an entirely different culture – the *application* of science can create dilemmas.

The questions that I have considered here are concerned primarily with the transplantation of an exogenous educational programme and the configuration of Arab/Muslim medical students as social subjects undertaking an American medical training. Despite the presumption that medical education can successfully be imported on the grounds that biomedical science and medical practice is universal, this study demonstrates how in the Qatari context, the professional training is impinged on by factors intrinsic and extrinsic to the educational programme. Institutional and individual responses to the dilemmas encountered by the educational recipients have been viewed through the lens of organ transplantation, imparting insight into the nuances and specificities of a transnational medical college as it attempts to graft itself onto a so called “traditional” Qatari context.

Is it a match? Evaluating the transplant metaphor

Organ transplantation is an anthropological trope commonly cited in the literature on globalisation. The same technologies (transport, ICTs) facilitate organ transplantation and delivery of educational transplants. Used metaphorically, transplantation can be applied fruitfully to a multiplicity of contexts, particularly that of transnational education.

A transplanted object (be it an organ, cutting or programme) retains many essential features and a similarity to the donor. Imperfections notwithstanding, the organ transplant metaphor provides a means of illuminating the sequence of procedures through which a functioning organ – the American medical programme – is sourced, matched, procured, transferred and sutured into a foreign recipient. It also delineates

the conditions required for the transplant to be viably successful. Be it the transplanting of a seed, or an organ, whether sutures are involved or not, a transplant requires aftercare in order to take root and thrive as an organic part of the new environment. Thus, the metaphor highlights the safeguards that are put into place in order to preserve the integrity of the transplant and aftercare required to avert rejection and to ensure that it flourishes.

When applied to transnational education, the transplantation metaphor is useful for charting the substantive changes that a pedagogical form undergoes as it is relocated, a process involving adaptation and a grafting onto new settings and bodies (e.g. institutional, students, health care system). Further the metaphor has the benefit that it can be tested at a number of levels, addressing the transformative impact it has on a range of recipients (the state, students) who mediate educational transplants whilst providing scope for the value regimes, technological improvements and administrative systems assembled to render such transplantation possible.

Educational transplants are prompting “a shift from a national to a transnational space for producing knowledgeable subjects” as well as a “rupturing of the nation state as the frame of educational strategies” (Ong 2006: 140). No longer constrained by “...the notion that the nation-state is a fixed territoriality, entrepreneurial governmentality corrals experts, knowledge, and skills from far-flung sources” (Ong 2006: 20). Such assemblages enable students to access high calibre education from outside the nation-state without leaving home. The Qatari post-secondary system has now developed links to diverse academic locations, wherein the nexus of national and transnational educational elements form contingent and mutually constitutive relationships, rendering each branch campus a truly heterogeneous space.

Throughout the thesis, I have noted a number of paradoxes or internal tensions that threaten the basic goals of the “transplant” to replicate exactly the donor institution’s programme. Unlike the university programme that is designed to promote a set of American values, the Qatari state is not aiming to produce neoliberal subjects trained

for employment in *global* knowledge-driven economies. Rather, citizens are being presented with opportunities to equip themselves with specific skills in order to participate in the development of a *domestic* knowledge-based economy. The students themselves become increasingly patriotic and locally committed as they confront the challenges of becoming international physicians.

While most students quickly make up gaps in language and learning skills, and while the science “in itself” poses no problems even to the most devout Muslim students, in the case of medical training there can be no “science in itself”, it is all about practice, and practice always takes place in context. This is where the ethical challenges of “educational transplants” or “internationalisation” arise.

So the question, from the perspective of internationalisation of western HEIs is – how specific is this to medicine? Of course, medicine involves dealing with patients’ bodies and beliefs, working in collaboration or in teams with other experts who may or may not share one’s “medical culture” – it is an extreme case. One might legitimately ask whether the same problems would not be encountered to some degree with most professional training programmes (e.g. business, law, engineering or scientific research). The same question applies to social sciences and humanities as Western universities are exporting these programmes abroad too. This leads us back to the question posed in Chapter 5 about how different epistemologies translate and what factors facilitate or impede flows of knowledge as they travel between two distinct locations. What remains constant and what changes as Western tertiary education is adopted around the world provides a window into the recipient cultures.

As processes of globalisation enable a broader range of educational packages to travel, questions pertaining to the universality of these pedagogical models must be raised. That biomedical practices and institutions originating in the metropole can be duplicated exactly and be transplanted seamlessly elsewhere can no longer be presumed. Context must be taken into consideration. Ethnographies that have examined health care delivery in developing nations tend to focus on relationships

and issues pertaining to “competition and complementarity, which prevails between indigenous practitioners and Western-type practitioners” (Gallagher and Searle 1984: 210). Yet, the tensions I have considered here are not about competition and complementarity associated with traditional healing and biomedicine, so much as similarities and divergences between indigenous and American modes of practice *within* the educational and biomedical model operating in Qatar.

The case study of WCMC-Q student-doctors operating in the clinical terrain reflects the influence of the local environment on the global in that it affords an opportunity to see how the informants impose their own cultural dispositions on clinical practice and interpret what they are taught at Cornell in accordance with their own cultural codes. In particular, it is the ethics and codes of conduct that become “Qatarized” in Doha, shaped as they are by Arab mores and values, demonstrating that “not all aspects of biomedicine become equally hybridized when they [are] diffused from the core areas of development to the peripheries” (Finkler 2004: 2048). Thus, ethical, infrastructural and procedural components warrant negotiation in the Qatari context.

In terms of the transplant successfully revitalising the health and education sectors in Qatar, WCMC-Q appears to be doing just the invigorating job one would hope from a transplant. In terms of replication, however, the process has proven far more complex. It has not simply been a case of moving a plant/organ from one location/body to another, but has also involved dynamic exchanges between the institutional donor and its recipients. While most elements of the biomedical/bioethical training are transplanted unchanged, a few components become amalgams of the two settings. Nowhere is this more obvious than in the clinical sphere where professionalism and some aspects of the clinical encounter cannot simply be transplanted unchanged because these components require a degree of cultural integration. In this respect, one might be tempted to regard these clinical elements as hybrids rather than transplants although prevailing disparities of power mean that US traits, *not* Qatari, are taken as the desired goal.

An increasing number of countries are seeking to improve their provision of education via the importation of western models of education. This expansion of higher education puts Western/metropolitan knowledge at the core of the enterprise. Further, the disembedded institution and the relationships formed with “locationally distant” others (e.g. absent professors) mean that the educational experience is impacted “not just by what is immediately present but also by influences quite removed [and socially incongruous] from them” (Inda and Rosaldo 2002: 8). As WCMC-Q demonstrates, a successful model of transnational medical education entails a complex process involving not only the maintenance of the standards, values and traditions of the founding campus, but also careful consideration of the values of the new students and their respective socio-cultural context. It is essential for providers of transnational education to reflect critically on and assess the compatibility of their curricular content, modes of delivery and embedded assumptions – in other words slightly tailor the programme to suit the new educational recipients. By modifying and adapting their innovative programmes (e.g. perhaps introducing a module on All-things-American to bridge knowledge gaps; cultural sensitivity training for NY-based lecturers), institutional brokers will not only enhance their programmes but also learn how to transcend cultural boundaries successfully. On balance, however, I would argue that WCMC-Q students are learning very valuable lessons from the culturally-blind nature of the current course, even if they are not stipulated “learning outcomes”, enabling them to become familiar with two distinct medical systems.

Neoliberalism – efficacious or not?

In particular, this case study offers a contribution to critical debates within anthropology about the usefulness and uselessness of the blanket term “neoliberalism”. I have attempted to understand how neoliberalism – which emphasises education for employment – contradicts, complements or coexists with the goals of the host state. It is clear throughout the thesis that in Qatar there is no pretence of leaving it to the market to solve problems. Instead, the “state” (as the

tool of powerful individual players like HH) is actively implementing Qatarization measures and zoning strategies, investing in institutions and re-working citizenship requirements. So the extent to which Qatari policy is neoliberal or even seeking to form neoliberal citizens, is questionable, even where it is collaborating with neoliberal institutions from outside or seeking to insert itself in (supposedly neoliberal) global fields of action.

While a useful starting point, Ong's definition of neoliberalism does not adequately convey the overlapping contours of spatial, institutional and ethical zones at play in the Qatari setting. This can be attributed to the fact that Education City stands at the intersection of two sets of interests, needing to be at one with the globalised world while aspiring to stand apart from it. The assemblage of expertise, technologies and forms of governance compiled within the specially designated zone of Education City clearly illustrates a paradoxical case of importing the alien to fortify the native. Put simply, Qatar is changing to stay the same. By tapping into global academic circuits and transplanting educational programmes from abroad, the Qatari elite is seeking primarily to strengthen and sustain its domestic situation. As I showed in Chapter 4, the situation unfolding in Education City suggests that the goals of the host state are much more complex than the blunt instrument of "neoliberalism" allows for.

In the neoliberal era of globalised higher education, universities are expected to produce commercially oriented professionals, actors who are groomed to work in the global workplace and participate in knowledge economies. While the education procured at the foreign universities trains Qataris to perform in world arenas, a number of measures have been implemented to keep Qatari values afloat and to nourish a local set of principles of development. Within Qatar, local workings-out of a "knowledge economy" and the "production of new knowledge" are tempered by the moral and ethical values attached to medical expertise by the Qatari students. Added to this is the students' insistence on the spatial rootedness of their profession and a deep-seated desire to contribute to their own society (as opposed to the

supposedly ethics-neutral, spatially free-floating knowledge and qualifications of neoliberal knowledge economy ideology). In these ways, Ong's notion of flexible citizenship does not transfer to the Gulf. In stark contrast to Ong's "flexible and mobile citizens", following the conclusion of their American training, many WCMC-Q graduates intend to return and set up lives for themselves somewhere in the Arab world.

In this thesis, I have explored how a malleable and selective form of neoliberal logic has been deployed in Qatar for the purposes of remaking citizen subjects and redefining spaces (economically, politically and culturally) in order to realise its national development agenda, with the additional benefit of integrating itself into transnational markets. Specifically, I have looked at how the Qatari government made a series of calculative decisions as it introduced a number of mechanisms in its administration of Education City, a primary site of knowledge production. In so doing, the authoritarian regime has instituted an experimental zone of graduated sovereignty, wherein the state works in conjunction with globally recognised institutions for the stated purpose of transforming its citizenry (as well as regional actors) via post-secondary education. Put another way, Education City can be regarded as a locus of experimentation with an enterprising mode of Islamic governmentality that draws on foreign expertise to train new kinds of Qatari subjects. Cornell's degree of Doctor of Medicine has been sought out, manipulated and shaped by the Qataris for their own means. Thus, international education is a malleable artefact that nations around the globe can adapt as necessary and employ in a variety of ways to realise their respective goals.

As the case study demonstrates, an assemblage of institutional, structural, cultural and religious conditions influence the reception, appropriation and enactment of global forms of education in different social-cultural milieus. In this instance, Arabic and Islamic values inform the reception of a transnational model of medical education. Yet, the current students are effectively meeting the requirements of neoliberal Cornell *and* of patriotic Qatar.

The scenarios materialising in this Gulf setting underscore both the institutional assumptions implicit in a medical curriculum and some culturally bounded practices that must be taken into account when working in transnational medical settings. In spite of these hurdles, however, the first four classes of home-grown “American-style” medical graduates have now gone on to secure highly competitive residency spots in the US and the Gulf, indicating that the educational transplant has been a success and proving that it is indeed possible to train American-style doctors in a non-American setting.

Appendix A: Abbreviations

AAMC	Association of American Medical Colleges
CIA	Central Intelligence Agency
CSC	Clinical Skills Center
CTR	Centre
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition
ECFMG	Educational Commission for Foreign Medical Graduates
EBM	Evidence-Based Medicine
ESL	English as a Second Language
FMG	Foreign Medical Graduate
G-20	The Group of Twenty Finance Ministers and Central Bank Governors
GATS	General Agreement on Trade in Services
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GTA	Gynecological Teaching Assistant
HEI	Higher Education Institute
HH	Her Highness
HMC	Hamad Medical Corporation
ICT	Information and Communication Technology
IMF	International Monetary Fund

JCI	Joint Commission International
LCME	Liaison Committee on Medical Education
LVL	Live Video Lecture
LVC	Live Video Conference
MCAT	Medical College Admission Test
MPS	Medicine, Patients and Society
NBME	National Board of Medical Examiners
NY	New York
NYC	New York City
NYPH	New York Presbyterian Hospital
OECD	Organisation for Economic Co-operation and Development
OIC	Organisation of the Islamic Conference
OSF	On-site Faculty
OSCE	Objective Structured Clinical Examination
PAFAMS	Panamerican Federation of Associations of Medical Schools
PLVC	Post Live Video Conference
PBL	Problem-Based Learning
QA	Qatar
QNRF	Qatar National Research Fund
QF	Qatar Foundation for Education, Science and Community Development
QSTP	Qatar Science and Technology Park
QU	Qatar University

R&D	Research and Development
SEC	Supreme Education Council
SP	Standardised Patient
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States of America
USMLE	United States Medical Licensing Examination
UTA	Urological Teaching Assistant
VSL	Video-Streamed Lecture
WCMC-Q	Weill Cornell Medical College in Qatar
WCMC-NY	Weill Cornell Medical College in New York
WFME	World Federation for Medical Education
WTO	World Trade Organization

Appendix B: Announcement of Agreement

April 9, 2001.

Proclamation

Whereas,

Cornell University and its Weill Medical College are recognized leaders and innovators in the fields of education, research and health care, and

Whereas,

Cornell University and its Weill Medical College have demonstrated a long standing commitment to sharing their expertise in education, research and health care throughout the world, and

Whereas,

the Qatar Foundation For Education, Science and Community Development wishes to further demonstrate its commitment to the advancement of education, research and health care for the people of the state of Qatar and its neighbours in the Gulf Region

Now Therefore,

On this Ninth Day of April in the year Two Thousand and One, in New York, New York, the leaders of Cornell University, its Weill Medical College and the Qatar Foundation for Education, Science and Community Development announce a unique partnership and celebrate the establishment of the:

Weill Cornell Medical College in Qatar

Appendix C: Students Interviewed

Code name	Year of Study	Nationality	Gender	Secondary Education	Mother Tongue
10	Fourth	Qatari	M	Government*	Arabic
2 J	Fourth	Qatari	F	Government*	Arabic
3 A	Fourth	Qatari	F	Government*	Arabic
4 M	Fourth	Qatari	F	International	Arabic
5 O	Fourth	Syrian	M	Government	Arabic
6 M	Third	Qatari	F	Government	Arabic
7 J	Third	Qatari	F	International	English
8 S	Third	Egyptian	F	Government	Arabic
9 N	Second	Qatari	F	International	Arabic
10 A	Second	Syrian	M	Government	Arabic
11 A	Second	Palestinian-Jordanian	M	Government	Arabic
12 M	Second	Qatari	M	Government*	Arabic
13 A	Second	Qatari	F	Government	Arabic
14 M	Second	Palestinian	M	Government	Arabic
15 A	Second	Syrian	M	Government	Arabic
16 H	Second	Qatari	F	Government	Arabic
17 E	First	Qatari	M	Government*	Arabic
18 S	First	Palestinian	F	Government	Arabic
19 E	First	Qatari	F	International	Arabic
20 B	First	Qatari	F	Government*	Arabic
21 N	First	Qatari	F	Government*	Arabic
22 J	First	Iraqi	M	Government	Arabic
23 N	First	Qatari	M	Government*	Arabic
24 A	First	Palestinian-Jordanian	M	Government	Arabic
25 J	Premed 2	Egyptian	F	Government	Arabic
26 S	Premed 2	Lebanese	M	Government*	Arabic
27 M	Premed 2	Iraqi	M	Government	Arabic
28 S	Premed 2	Qatari	F	International	Arabic
29 M	Premed 2	Iraqi	M	Government	Arabic
30 F	Premed 1	Egyptian	F	Government	Arabic
31 H	Premed only	Qatari	F	Government	Arabic
32 A	Premed only	Qatari	F	Government	Arabic

* Government-funded scientific school

Appendix D: WCMC-Q Faculty and Administrators Interviewed

Position	Nationality
Dean of WCMC-Q	American
Associate Dean for Pre-medical Education	British
Associate Dean of Student Affairs	American/Lebanese
Associate Dean of Clinical Affairs	American/Egyptian
Associate Professor – Medical Program	American
Associate Professor – Medical Program	American
Associate Professor – Medical Program	American
Professor – Pre-medical Program	American
Professor – Pre-medical Program	American
Professor – Pre-medical Program	American
Professor – Pre-medical Program	American
Director of Student Affairs	American
Director of Admissions	American
Admissions Specialist	Palestinian/Jordanian
Student Academic Counselor	American

Appendix E: QF Stakeholders Interviewed

Individual	Position	Background
Her Highness Sheikha Moza bint Nasser	Chairperson of Qatar Foundation for Education, Science and Community Development and UNESCO Special Envoy for Basic and Higher Education.	B.A. Sociology Qatar University 1986 Qatari

Dr. Mohammad Fathy Saoud	President of Qatar Foundation and Vice-Chairman of the Board of Governors and Chairman of the Executive Committee of the Sidra Medical and Research Center. Former positions held include: Higher Education Advisor to the QF Board of Directors and Founding Dean of Science at Qatar University.	Ph.D Parasitology London School of Tropical Medicine, London University 1965 B. Sc Ain Shams University 1965 Fellow of the Royal Society of Tropical Medicine and Hygiene Published extensively in international journals in the fields of Parasitology and Immunology Egyptian
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Appendix F: GDP Per Capita (US\$), 1980 – 2009

Year	GDP per capita (current US\$)
2009	69 754
2008	86 436
2007	70 986
2006	60 460
2005	48 609
2004	39 741
2003	32 171
2002	28 288
2001	27 054
2000	28 793
1999	21 020
1998	18 050
1997	20 494
1996	16 854
1995	15 479
1994	14 317
1993	14 177
1992	15 478
1991	14 288
1990	15 747
1989	14 398

1988	14 001
1987	13 299
1986	13 096
1985	17 062
1984	20 095
1983	21 195
1982	27 435
1981	34 487
1980	34 122

Source: World Bank (2011b)

Appendix G: Academic Institutions in Qatar Unaffiliated With Education City

Institution	Degree	Field of Study	Date Established
Qatar University (QU)	Undergraduate – Bachelors	Education, Arts and Sciences, Science, Sharia Law, Islamic Studies Engineering Business and Economics Pharmacy	1977 1980 1985 2007
	Post-graduate diploma	Education, Master of Business Administration	
Stenden University - Qatar (formerly CHN University Netherlands but changed name when merged with Drenthe University in 2009)	Undergraduate - Bachelors	Hospitality and Tourism, Business Administration	2000
College of the North Atlantic (CAN-Q)	2-year diploma/certificate	Engineering, business, health sciences, IT, trades	2002
University of Calgary	Undergraduate - Bachelors	Nursing	2007
Houston Community College in Qatar	Associate degrees, certificates, workforce training	Arts and Science	2010

Appendix H: International Campuses in MENA (excluding Qatar)

Bahrain

AMA Computer University (The Philippines)

New York Institute of Technology (USA)

Royal College of Surgeons (Ireland) 2004

Jordan

DePaul University (USA)

Kuwait

Box Hill Institute (Australia)

United Arab Emirates (listed according to Emirate)

Abu Dhabi

INSEAD (France)

Masdar Institute of Science and Technology (America) 2009

New York Film Academy (USA)

New York Institute of Technology (USA)

New York University (USA) 2010

Paris Sorbonne University (France) 2006

Dubai

American University of Dubai (America) 1995

Bharati Vidyapeeth University (India)

Birla Institute of Technology and Science (India)

Boston University Institute for Dental Research and Education (USA)

British University in Dubai (United Kingdom) 2004

Cambridge College International (Australia)

Canadian University of Dubai (Canada) 2006

CASS Business School (United Kingdom)

EHSAL-Hogeschool-Universiteit Brussels (Belgium)

French Fashion University Esmod (France)

Harvard Medical School Dubai Center Institute for Postgraduate Education and Research (America) 2004

Heriot-Watt University (United Kingdom) 2005

Hult International Business School (USA)

Institute of Management Technology (India)

Islamic Azad University (Iran)

London School of Business (United Kingdom)

Manchester Business School (United Kingdom) 2009

Manipal University (India)

Michigan State University (USA) 2008 but closed most of its operations in July 2010.

Middlesex University (United Kingdom) 2005

Murdoch University (Australia)

Postgraduate Institute of Management, The University of Sri Jayewardenepura (Sri Lanka) - Closed 2009

Rochester Institute of Technology (USA) 2008

Royal College of Surgeons (Ireland) 2005

Saint-Petersburg State University of Engineering and Economics (Russia)

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (Pakistan)

Saint Joseph University (Lebanon) 2008

SP Jain Centre of Management (India) 2004

University of Bradford (United Kingdom)

University of Exeter (United Kingdom) 2010

University of Strathclyde Business School (United Kingdom) 1995

University of Southern Queensland (Australia) closed 2005, was open less than a year.

University of Waterloo (Canada) 2009

University of Wollongong (Australia) 1993

Ras Al Khaimah

Federal Institute of Technology Lausanne-EPFL (Switzerland)

George Mason University (USA) – closed in 2009, campus turned into American University of RAK

Madurai Kamaraj University (India)

Mahatma Gandhi University (India) (Appears to be moving to RAK from Dubai)

University of Bolton (United Kingdom)

University of Pune (India)

Vatel International Business School (France)

Sharjah

American University of Sharjah (America) 1997

Saudi Arabia

King Abdullah University of Science and Technology is an experimental model of postgraduate education. KAUST has a Global Collaborative Research programme which has established Academic Partnerships with: Woods Hole Oceanographic Institution; Institut Francais du Petrole; National University of Singapore; The Hong Kong University of Science and Technology; The American University in Cairo; Technische Universität München; King Fahd University of Petroleum and Minerals; University of California, San Diego. Under the agreements, research commences at the partner's institution and eventually migrates facets of the research and faculty to the KAUST campus. 2009

Yemen

International University College of Technology Twintech (Malaysia)

Source: Global Higher Education

As of 17 January 2011: http://globalhighered.org/ghe/Branch_Campuses.html

Appendix I: Population of Qatar, By Gender, 1997-2010

Year	Male	%	Female	%	Total
1997	342 459	65.6	179 564	34.4	522 023
2004	496 382	66.7	247 647	33.3	744 029
2010	1 284 739	75.6	414 696	24.4	1 699 435

Source: QSA 2010 Census

Appendix J: Total Population by Age Groups and Gender

Age Groups	Male	%	Female	%	Total	%
0-4	45 838	3.6	43 669	10.5	89 507	5.3
5-9	40 007	3.1	38 079	9.2	78 086	4.6
10-14	33 295	2.6	31 696	7.6	64 991	3.8
15-19	33 868	2.6	26 676	6.4	60 544	3.6
20-24	153 931	12.0	38 022	9.2	191 953	11.3
25-29	219 575	17.1	59 612	14.4	279 187	16.4
30-34	216 278	16.8	53 965	13.0	270 243	15.9
35-39	194 313	15.1	40 260	9.7	234 573	13.8
40-44	148 899	11.6	29 429	7.1	178 328	10.5
45-49	95 688	7.4	21 252	5.1	116 940	6.9
50-54	54 751	4.3	14 169	3.4	68 920	4.1
55-59	29 327	2.3	8 050	1.9	37 377	2.2
60-64	10 820	0.8	4 149	1.0	14 969	0.9
65-69	4 075	0.3	2 379	0.6	6 454	0.4
70+	4 074	0.3	3 289	0.8	7 363	0.4
Total	1 284 739	100	414 696	100	1 699 435	100

Source: QSA 2010 Census

Appendix K: Qatari Employment in Various Sectors by Gender, 2001

Sector	Total	Female	Male
Government dept.	31 474	9 411	22 063
Government company	5 096	764	4 332
Mixed	1 803	157	1 646
Private	1 304	223	1 081
Diplomatic/Int'l/Regional	16	3	13
Domestic	10	0	10
Total	39 703	10 558	29 145

Source: Planning Council 2002

Appendix L: Economically Active Population (15 years and above) by Nationality, Gender and Occupation, March 2006

Occupation	Total	Total Females	Total Males	Total Non-Qataris	Non-Qatari Females	Non-Qatari Males	Total Qataris	Qatari Females	Qatari Males
Legislators/Senior Officials/Managers	16 483	1 191	15 292	11 283	514	10 769	5 200	677	4 523
Professionals	72 689	20 501	52 188	55 579	10 245	45 334	17 110	10 256	6 854
Technicians/Associate Professionals	39 445	7 527	31 918	30 017	5 419	24 598	9 428	2 108	7 320
Clerks	41 051	9 317	31 734	27 900	4 223	23 677	13 151	5 094	8 057
Service Workers/Shop Sales Workers	48 615	6 158	42 457	45 563	5 604	39 959	3 052	554	2 498
Skilled Agricultural and Fishery Workers	5 231	0	5 231	5 231	0	5 231	0	0	0
Craft and Related Trade Workers	128046	173	127873	127228	173	127055	818	0	818
Plant and Machine Operators	63 692	28	63 664	62 256	28	62 228	1 436	0	1 436
Elementary Occupations	116197	32 454	83 743	108079	31 633	76 446	8 118	821	7 297
Total	531449	77 349	454100	473136	57 839	415297	58 313	19 510	38 803

Source: QSA – Sample Labor Force Survey, March 2006
Does not include individuals seeking first time employment

Appendix M: Residency Match Results

Gender	Programme	Country	Specialty	Year
Male	NYP Hosp-Weill Cornell Med Ctr, NY	US	Internal Medicine	2008
Male	HMC	Qatar	Surgery	2008
Female	NYP Hosp-Weill Cornell Med Ctr	US	Anaesthesiology	2008
Female	HMC	Qatar	Radiology	2008
Male	Research	US	Internal Medicine	2008
Female	NYP Hosp-Columbia/ Cornell-NY	US	Emergency Medicine	2008
Female	NYP Hosp-Weill Cornell Med Ctr	US	Obstetrics/Gynaecology- Preliminary	2008
Male	Rush University Med Ctr, IL	US	Anaesthesiology	2008
Female	Lahey Clinic, MA	US	General Surgery	2008
Female	University of Wyoming-Cheyenne, WY	US	Family Medicine	2008
Female	NY Hosp Med Ctr Queens-NY	US	General Surgery	2008
Female	Virginia Commonwealth University Health System, VA	US	Internal Medicine	2008
Male	Johns Hopkins Hospital, MD	US	Surgery-Preliminary	2008
Male	Univeristy of Minnesota Med School	US	Neurosurgery	2008
Female	University of Michigan	US	Research – Obstetrics/ Gynaecology	2008
Female	NYP Hosp-Columbia & Cornell	US	Physical Medicine & Rehabilitation	2009
Female	University of Connecticut Health Ctr	US	Family Medicine	2009
Female	HMC	Qatar	Internal Medicine	2009
Female	Methodist Hospital, TX	US	Surgery-Preliminary	2009
Female	Research	US	Dermatology	2009
Female	NY Hosp Medical Ctr Queens-NY	US	Internal Medicine	2009
Female	NYP Hosp-Weill Cornell Med Ctr	US	Paediatrics	2009
Male	Virginia Commonwealth University Health System	US	Internal Medicine	2009

Female	Virginia Commonwealth University Health System	US	Internal Medicine	2009
Female	HMC	Qatar	Surgery	2009
Male	Research	US	Internal Medicine	2009
Female	NYP Hosp-Weill Cornell Med Ctr	US	Internal Medicine	2009
Male	NYP Hosp-Weill Cornell Med Ctr	US	Neurology	2009
Female	Virginia Commonwealth University Health System	US	Internal Medicine	2009
Female	HMC	Qatar	Internal Medicine	2009
Male	Cleveland Clinic Foundation, OH	US	Internal Medicine	2009
Female	NYP Hosp-Weill Cornell Med Ctr	US	Psychiatry	2009
Male	Vanderbilt University Medical Ctr, TN	US	Internal Medicine	2010
Male	Providence Hospital and Med Ctr, MI	US	Internal Medicine	2010
Female	HMC	Qatar	Family Medicine	2010
Male	George Washington University Medical Ctr, DC	US	Internal Medicine	2010
Male	HMC	Qatar	Surgery	2010
Male	Methodist Hospital, TX	US	Internal Medicine	2010
Male	NYP Hosp-Weill Cornell Med Ctr	US	Internal Medicine	2010
Male	Johns Hopkins Hospital	US	Internal Medicine	2010
Female	University of Louisville School of Medicine, KY	US	Obstetrics-Gynaecology	2010
Male	North Shore Long Island Jewish Health System, NY	US	General Surgery	2010
Male	Drexel University College of Medicine/ Hahnemann University Hospital, PA	US	Obstetrics-Gynaecology	2010
Female	HMC	Qatar	Surgery	2010
Male	Research at NYP Hosp-Weill Cornell Med Ctr	US	Internal Medicine	2010
Male	Cleveland Clinic Foundation	US	Internal Medicine	2010
Female	University of Buffalo School of Medicine, NY	US	Paediatrics	2010

Female	HMC	Qatar	Dermatology	2010
Male	University of Connecticut Health Ctr	US	Family Medicine	2011
Male	NYP Hosp-Weill Cornell Med Ctr-NY	US	Emergency Medicine	2011
Male	Virginia Commonwealth University Health System-VA	US	Internal Medicine	2011
Female	NYP Hosp-Weill Cornell Med Ctr-NY	US	Radiology	2011
Female	Wright State University - OH	US	Pediatric Medicine	2011
Female	Vanderbilt University Medical Ctr - TN	US	Internal Medicine	2011
Female	Rochester General Hospital - NY	US	Internal Medicine	2011
Female	Case Western Reserve University, OH	US	Pediatric Medicine	2011
Female	Cleveland Clinic Foundation	US	Internal Medicine	2011
Male	Johns Hopkins Hosp – MD	US	Internal Medicine	2011
Male	NYP Hosp-Weill Cornell Med Ctr – NY	US	General Surgery	2011
Female	East Carolina University Med Ctr	US	Pediatric Medicine	2011
Male	Virginia Commonwealth University Health System –VA	US	Internal Medicine	2011
Male	Rochester General Hospital - NY	US	Internal Medicine	2011
Male	University of Vermont Academic Med Ctr	US	Neurology	2011
Female	Virginia Commonwealth University Health System –VA	US	Neurology	2011
Female	University of Arizona and Affiliated Hospitals	US	Family Medicine	2011
Female	Virginia Commonwealth University Health System	US	Internal Medicine	2011
Female	NYP Hosp-Weill Cornell Med Ctr	US	Radiology	2011
Female	University of Hawaii	US	Obstetrics-Gynaecology	2011
Female	Henry Ford Hospital, MI	US	Internal Medicine	2011
Female	HMC	Qatar	Pediatric Surgery	2011
Male	HMC	Qatar	Internal Medicine	2011

Male	Cincinnati Children's Hospital Med Ctr – OH	US	Pediatric Surgery	2011
Female	HMC	Qatar	General Surgery	2011
Female	University of South Alabama	US	Pediatric Medicine	2011
Female	Englewood Hospital and Med Ctr, NJ	US	Internal Medicine	2011

Appendix N: QF Board Members

Member	Background	Nationality
HH Sheika Moza bint Nasser	Chairperson of QF (Appendix E)	Qatari
Dr. Saif Ali Al-Hajari	-Vice-Chairperson of QF -Founder/Chairman of Friends of the Environment Center -Vice-Chair of Shafallah Center for Children with Special Needs -BSc Qatar University; MA and PhD University of South Carolina	Qatari
Dr. Mohammad Fathy Saoud	President of Qatar Foundation (Appendix E)	Egyptian
His Excellency Dr. Abdullah Hussain Al-Kubaisi	-Executive Director of the Office of Her Highness -Former Chairman of the Qatar Science and Technology Park -Former Dean of the College of Science of Qatar University -PhD University of London; MSc North Carolina Agricultural and Technical State University; BSc Qatar University	Qatari
Dr. Sheikha Abdulla Al-Misnad	-President of Qatar University -Member of the UN University Council -Member of Qatar's Supreme Education Council -Founding Chair of the Academic Committee at QF -BA Qatar University; PhD Durham University	Qatari

His Excellency Sheikh Dr. Hamad Bin Nasser Al-Thani	<ul style="list-style-type: none"> -General Manager of the Qatar Development Bank -Chairman of Qatari-German Company for Medical Devices -Chairman of Future Pipe Industries -Vice Chairman of Dlala Holding Company -Former Deputy Treasurer of Qatar Liquified Gas Company -Former Controller of Policies, Rules and Regulations at Qatar Petroleum -BA Metropolitan State College of Denver; MBA and PhD University of Wales 	Qatari
Dr. Jordan Cohen	<ul style="list-style-type: none"> -Former President and CEO of the Association of American Medical Colleges -Chair of the American Board of Internal Medicine and of the Accreditation Council for Graduate Education -Former Dean of State University of NY at Stony Brook -Member of the Board of Governors and the Executive Committee of QF's Sidra Medical and Research Center -Graduate of Yale University and Harvard Medical School 	American
Dr. Vartan Gregorian	<ul style="list-style-type: none"> -President of Carnegie Corporation of NY -Former President of Brown University -Former President of NY Public Library -Holder of National Humanities Medal (1998) and the Medal of Freedom (2004) -BA Stanford; dual PhD in history and humanities from Stanford 	Iranian-American

His Excellency Dr. Hajar Ahmed Hajar Al Binali	<ul style="list-style-type: none"> -Advisor for Health Affairs -Chairman of Cardiology and Cardiovascular Surgery Dept. at HMC -President of the Gulf Heart Association -International Advisor of the American College of Cardiology -Former Qatari Minister of Public Health -Former Chairman of the Board of Directors and Managing Director of HMC -BA and MD degrees from University of Colorado 	Qatari
His Excellency Yousef Hussain Kamal	<ul style="list-style-type: none"> -Qatari Minister of Finance -Minister of Economy and Finance -Serving Chairman, Vice-Chairman and Board member in many major Qatari companies -Qatari IMF representative -Qatari World Bank representative -Qatari representative of the Arab Monetary Fund, the Islamic Development Bank and the OPEC Fund -Graduated from Cairo University 	Qatari
Sir Charles Masfield	<ul style="list-style-type: none"> -Chairman of Helvetica, the Swiss Financial Management Institution -Former President of BAE Systems, Chairman of medical research company Microsulis -Former Commercial Director of Airbus Industry -Former Chairman of Transatlantic Business Development in which capacity he interfaced with the European Union and the US Administration on behalf of 800 major companies within the European industry -Cambridge graduate 	British

His Excellency Sheikh Dr. Ahmed Zaki Yamani	<ul style="list-style-type: none"> -Former Saudi Minister of Petroleum and Mineral Resources -Former OPEC President -Founder of the Center for Global Energy Studies -Founder Al Furqan Islamic Heritage Foundation -Established Saudi Arabia's national oil company as well as the University of Petroleum and Minerals in Dhahran with the help of MIT, Princeton University and AUB -Degrees from NYU School of Law, Harvard Law School and PhD from University of Exeter 	Saudi
Dr. Ahmed Zewail	<ul style="list-style-type: none"> -Linus Pauling Chair Professor of Chemistry and Physics and the Director of the Physical Biology Center for Ultrafast Science & Technology at the California Institute of Technology -Nobel Prize for Chemistry (1999) -Holder of 30 honorary degrees in sciences, arts, philosophy, law, medicine and humanities from around the world -Elected member of several international academies and societies -Serves as trustee and Board member of universities, research insitutions and major corporations -BA and MSc University of Alexandria; PhD University of Pennsylvania; Post-doctoral fellowship University of California, Berkeley 	Egyptian-American

Source: Qatar Foundation (2007)

Appendix O: WCMC-Q Joint Advisory Board Members

Member	Represents	Background
H.E. Ghalia Bint Mohammed Al-Thani, M.D.	QF	Co-Chair, WCMC-Q Joint Advisory Board Chairperson Member, Qatar Supreme Council of Health
Mohammad Fathy Saoud, Ph.D	QF	QF President
Hassan Ali. S.A. Al Thani, MB.Bch, FRCS (C), FRCS (Ire), CAB	QF	Head of Vascular Surgery Director of Arab Board Program of Surgery in Qatar
Jassim Al Suwaidi, M.B., Ch.B., B.A.O., L.R.C.P. & S.I. (Honors)	QF	Consultant Cardiologist, HMC
Antonio M. Gotto, Jr., M.D., D.Phil.	Cornell University	Co-Chair, WCMC-Q Joint Advisory Board Provost for Medical Affairs Dean, WCMC
Mr. Tarek Abdel-Meguid	Cornell University	Member, Board of Overseers, WCMC
Mrs. Barbara B. Friedman	Cornell University	Vice-Chair, Board of Overseers, WCMC
James J. Mingle, Esq.	Cornell University	University Counsel & Secretary of the Corporation Cornell University
Jordan J. Cohen, M.D.	Independent Representative	President Emeritus, Association of American Medical Colleges
Ziyad Mousa Hijazi, M.D., M.P.H.	Independent Representative	Professor of Pediatrics and Internal Medicine Director, Rush Center for Congenital and Structural Heart Disease
Sir Christopher Paine, D.M., F.R.C.P.	Independent Representative	Former President, British Medical Association
Javaid I. Sheikh, M.D.	Ex-Officio Member	Dean, WCMC-Q
Abdulla A. Al-Thani, Ph.D.	Ex-Officio Member	QF Vice-President, Education
Ms. Havva S. Idriss	Ex-Officio Member	Vice Dean for Administration, WCMC-Q
Mr. Sanford I. Weill	Ex-Officio	Chairman, Board of Overseers WCMC

Source: Weill Cornell Medical College in Qatar (2010)

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